Screwworm
mexico

March 22, 1972

Subject: Letter to Sr. Velasco Pascual

To: Frank Gonzalez
Agricultural Research Technician

Through: M. M. Crystal, In Charge
Mission, Texas

We are intrigued with a remark made in the July 1 - September 30 report of the cooperative research at Cotaxtla and have accordingly written a letter to Sr. Velasco inquiring further about the findings.

We feel that, for reasons of courtesy, the letter we write should be in good Spanish. Since you have played an important role in the Coxtaxtla cooperative research, can you help us out? Would you please translate our enclosed letter into Spanish and return it to us, together with your Spanish version, for final typing and mailing? We intend to send him both an English version and a Spanish one. Unfortunately, our ability to write Spanish in grammatically good form is much poorer than our ability to read it.

Have you, by any chance, observed screwworm activity around flowers?

Claude H. Schmidt

Claude H. Schmidt, Chief
Insects Affecting Man and
Animals Research Branch

Enclosure

cc:
R. O. Drummond

JAFluno/mjb

P

Subject: Letter to Dr. Velasco Ibarra

To: Isaac Cepeda
Agricultural Research Technician

Through: R. H. Crystal, In Charge
Quito, Ecuador

We are furnished with a remark made in the July 7 - September 30 report of the cooperative research at Portoviejo and have accordingly written a letter to Dr. Velasco Ibarra requesting further about the fruit flies.

We feel that for reasons of courtesy the letter we write should be in good Spanish. Since you have played an important role in the Portoviejo cooperative research, can you help us out? Would you please translate our enclosed letter into Spanish and return it to us, together with your Spanish version, for final typing and mailing. We thank you in advance for both an English version and a Spanish one. Unfortunately, our ability to write Spanish is grammatically good form is much poorer than our ability to read it.

Have you, by any chance, observed screwworm activity around Portoviejo?

Clinton H. Schneider

Clinton H. Schneider, Chief
Insect Affecting Man and
Animals Research Branch

Enclosure

cc:
R. H. Drummond

JAFlumo/mjb

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
Entomology Research Division
P. O. Box 986
Mission, Texas 78572

March 29, 1972

Subject: Letter to Sr. Velasco Pascual

To: Claude H. Schmidt, Chief
Insects Affecting Man and Animals Research Branch

Attached herewith is copy of your letter with translation into Spanish as you requested.

Maxwell M. Crystal
Research Entomologist
In Charge

Insects Affecting
Man & Animals

C.H.S.
~~R.A.H.~~
J.A.F.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
Entomology Research Division
P. O. Box 986
Mission, Texas 78572

March 29, 1972

Subject: Letter to Dr. Velasco Pascual

To: Claude H. Schmidt, Chief
Insects Affecting Man and Animals Research Branch

Attached herewith is copy of your letter with translation into Spanish as you requested.

Maxwell M. Crystal

Maxwell M. Crystal
Research Entomologist
In Charge

Screwworm
mexico

April 3, 1972

AIRMAIL

Sr. Hermenegildo Velasco Pascual
Jefe del Depto. de Entomologia
Instituto Nacional de Investigaciones Agricolas
Apartados 6-882, 6-883
Mexico 6, D. F.

Dear Sr. Velasco:

We have studied with much interest your report for the period July 1 through September 30, 1971, on the cooperative research conducted at Cotaxtla, Veracruz, Mexico. It is an excellent report reflecting careful work on the part of your staff. The subsequent report (so far only hurriedly read) also appears excellent.

Of particular interest is one item in the summary of the work on the behavior of released and native screwworm flies (pages 9, July 1 - Sept. 30 report), "También se observó que las moscas nativas dieron una coloración amarillenta (en el papal indicador) debido al polen de las flores que abundaron en esta época." Is it known which species of plants were being visited by the native screwworm flies? Perhaps one species of flowering plant was preferred by the flies; if so, this could prove to be interesting and perhaps useful information.

This finding was not, of course, the principal one from the research; but, as it relates to the ecology of the fly, such incidental observations may be very important to our knowledge of the screwworm.

Again, we congratulate you and your staff for excellent reporting and for research well done. With many thanks, I remain,

Sincerely yours,

Claude H. Schmidt, Chief
Insects Affecting Man and
Animals Research Branch

JAFluno/mjb

jaf

Translation of
attached

April 3, 1972

AIRMAIL

Sr. Hermenegildo Velasco Pascual
Jefe del Depto. de Entomologia
Instituto Nacional de Investigaciones Agricolas
Apartados 6-882, 6-883
Mexico 6, D. F.

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Again, we congratulate you and your staff for excellent reporting and for research well done. With many thanks, I remain,

Sincerely yours,

Claude H. Schmidt, Chief
Insects Affecting Man and
Animals Research Branch

JAFLuno/mjb

April 3, 1972

AIRMAIL

Sr. Hermenegildo Velasco Pascual
Jefe del Depto. de Entomologia
Instituto Nacional de Investigaciones Agricolas
Apartados 6-882, 6-883
Mexico 6, D. F.

Estimado Sr. Velasco:

Hemos estudiado con gran interés su reporte por el periodo del 1 de julio al 30 de septiembre de 1971, sobre la investigación cooperativa conducida en Cotaxtla, Veracruz, Mexico. Es un reporte muy excelente reflejando el cuidadoso trabajo de parte de sus empleados. El reporte subsiguiente (solo leido con rapidez) tambien parese excelente.

De particular interés es el detalle en el resumen del trabajo sobre la conducta de las moscas liberados y las moscas nativas del gusano barrenador (pagina 9, 1 de julio - 30 de septiembre) "También se observó que las moscas nativas dieron una coloración amarillenta (en el papel indicador) debido al polen de las flores que abundaron en esta época." ¿Se Sabe que especie de plantas fueron visitadas por las moscas nativas del gusano barrenador? Quisas una especie de planta de flor fué preferida por las moscas; si es asi, esto puede ser interesante y quisas la información sea útil.

Sin embargo este descubrimiento no es el principal de la investigacion pero como es relacionado con la ecología de la mosca, tales observaciones son muy importantes a nuestro conocimiento del gusano barrenador del ganado.

Nuevamente, felicitamos a Ud. y sus funcionarios por el excelente reporte y una investigación bien hecha. Muchas gracias.

Sinceramente

Claude H. Schmidt

Claude H. Schmidt, Jefe
Insects Affecting Man and
Animals Research Branch

JAFluno/mjb

Jaf

April 3, 1972

AIRMAIL

Sr. Hermenegildo Velasco Pascual
Jefe del Depto. de Entomología
Instituto Nacional de Investigaciones Agrícolas
Apartados 6-882, 6-883
México 6, D. F.

Estimado Sr. Velasco:

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De particular interés es el detalle en el resumen del trabajo sobre la conducta de las moscas liberadas y las moscas nativas del guano barrenador (página 9, 1 de julio - 30 de septiembre) "También se observó que las moscas nativas dieron una coloración amarillenta (en el papel indicador) debido al polen de las flores que abundaron en esta época." Se sabe que especie de plantas fueron visitadas por las moscas nativas del guano barrenador? Quisas una especie de planta de flor fue preferida por las moscas; si es así, esto puede ser interesante y quisas la información sea útil.

Sin embargo este descubrimiento no es el principal de la investigación pero como es relacionado con la ecología de la mosca, tales observaciones son muy importantes a nuestro conocimiento del guano barrenador del ganado.

Nuevamente, felicitamos a Ud. y sus funcionarios por el excelente reporte y una investigación bien hecha. Muchas gracias.

Sinceramente

Claude H. Schmidt, Jefe
Insects Affecting Man and
Animals Research Branch

JAF:lumo/mjb

Screwworm
mexico

April 21, 1972

Subject: Mexico Screwworm Field Programs

To: M. M. Crystal, In Charge
Mission, Texas

This is to confirm our discussions of April 20 concerning the future of field studies in Mexico. It is my feeling that we should begin to take greater advantage of Mr. Eddy's knowledge and experience as a field man. I believe we can best do this by having Mr. Eddy work periodically with Mr. Jones and thereby help indoctrinate Mr. Jones in field screwworm biology and ecology. It also seems logical now for Mr. Eddy to help with some of the attractant tests in Mexico when they can be combined with other Mexico travel. In general, it will probably be desirable to have one of the Spanish-speaking employees travel with Messrs. Jones and Eddy in order to assist them with language as well as provide other needed support.

In view of the above considerations, I have asked Mrs. Davis to forward the appropriate passport application forms for Mr. Eddy to complete.

R. A. Hoffman

R. A. Hoffman, Acting Chief
Insects Affecting Man and
Animals Research Branch

cc:
G. W. Eddy
C. M. Jones
R. O. Drummond
bc:
D. Davis

RAHoffman/mjb

CHS

Screwworm
Mexico

April 21, 1972

Subject: Mexico Screwworm Field Program

To: M. M. Crystal, In Charge
Mission, Texas

This is to confirm our discussions of April 20 concerning the future of field studies in Mexico. It is my feeling that we should begin to take greater advantage of Mr. Eddy's knowledge and experience as a field man. I believe we can best do this by having Mr. Eddy work particularly with Mr. Jones and thereby help indoctrinate Mr. Jones in field screwworm biology and ecology. It also seems logical now for Mr. Eddy to help with some of the attractant tests in Mexico when they can be combined with other Mexico travel. In general, it will probably be desirable to have one of the Spanish-speaking employees travel with Messrs. Jones and Eddy in order to assist them with language as well as provide other needed support.

In view of the above considerations, I have asked Mr. Davis to forward the appropriate passport application forms for Mr. Eddy to complete.

R. A. Hoffman, Acting Chief
Insects Affecting Man and
Animals Research Branch

cc:
G. W. Eddy
C. M. Jones
E. G. Drummond
bc:
D. Davis

RAHoffman/mjb

SCREWWORM ERADICATION PROGRAM

Agreement Between the
UNITED STATES OF AMERICA
and MEXICO

Effected by Exchange of Notes
Signed at México and Tlatelolco
August 28, 1972

with

Cooperative Agreement Between the
United States Department of Agriculture
and the Mexican Secretariat of
Agriculture and Livestock

NOTE BY THE DEPARTMENT OF STATE

Pursuant to Public Law 89–497, approved July 8, 1966 (80 Stat. 271; 1 U.S.C. 113)—

". . . the Treaties and Other International Acts Series issued under the authority of the Secretary of State shall be competent evidence . . . of the treaties, international agreements other than treaties, and proclamations by the President of such treaties and international agreements other than treaties, as the case may be, therein contained, in all the courts of law and equity and of maritime jurisdiction, and in all the tribunals and public offices of the United States, and of the several States, without any further proof or authentication thereof."

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Washington, D.C. 20402 - Price 15 cents

The Mexican Under Secretary of Foreign Relations to the American Ambassador

ESTADOS UNIDOS MEXICANOS
SECRETARIA DE RELACIONES EXTERIORES
MEXICO

II-159 TLATELOLCO, D. F., *28 de agosto de 1972.*

SEÑOR EMBAJADOR:

Tengo el honor de acusar recibo de la Nota de Vuestra Excelencia del día 28 de agosto de 1972, en la cual me comunica que vuestro Gobierno confirma el Acuerdo anexo para erradicar el gusano barrenador del ganado, suscrito en la ciudad de México el día 28 de agosto de 1972 por el Secretario de Agricultura y Ganadería de México y el Secretario de Agricultura de los Estados Unidos de América.

Tengo el agrado de manifestarle que mi Gobierno confirma asimismo ese Acuerdo.

Aprovecho la oportunidad para renovar a Vuestra Excelencia las seguridades de mi más alta consideración.

JOSÉ S. GALLASTEGUI

José S. Gallastegui

Excelentísimo Señor ROBERT HENRY MCBRIDE,
Embajador Extraordinario y Plenipotenciario
de los Estados Unidos de América,
Ciudad.

Translation

UNITED MEXICAN STATES
MINISTRY FOR FOREIGN RELATIONS
MEXICO

II-159 TLATELOLCO, D.F., *August 28, 1972*

MR. AMBASSADOR:

I have the honor to acknowledge receipt of Your Excellency's note of August 28, 1972, in which you inform me that your Government has confirmed the attached Agreement to eradicate screwworms, signed in Mexico City on August 28, 1972, by the Secretary of Agriculture and Livestock of Mexico and the Secretary of Agriculture of the United States of America.

I have the pleasure of informing you that my Government likewise confirms this Agreement.

I avail myself of this opportunity to renew to you, Mr. Ambassador, the assurances of my highest consideration.

José S. Gallastegui

José S. Gallastegui

His Excellency
Robert Henry McBride,
Ambassador Extraordinary and Plenipotentiary
of the United States of America,
Mexico, D.F.

AGREEMENT BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE REPUBLIC OF MEXICO TO ERADICATE SCREWWORMS

The object of this Agreement is to establish a joint program in the Republic of Mexico to eradicate screwworms (Cochliomya Homnivorax Coquerel) [1] from that part of Mexico north and west of the narrowest point of the Isthmus of Tehuantepec, and to establish a barrier of sterile screwworm flies at the Isthmus of Tehuantepec to protect those areas in Mexico freed from screwworm infestations. Mexico's Secretariat of Agriculture and Livestock, through its Subsecretariat of Livestock, and the United States Department of Agriculture, through its Animal and Plant Health Inspection Service, will participate in this Agreement in accordance with applicable laws.

Under the Act of February 28, 1947, as amended (21 U.S.C. 114b, 85 Stat. 418), the United States Department of Agriculture is authorized to cooperate with Mexico in the eradication of screwworms from that country. Under the Act of February 28, 1947, as amended, the Animal and Plant Health Inspection Service will conduct cooperative work with Mexico's Subsecretariat of Livestock.

The Government of Mexico subject to the availability of funds under the expenditures budget of the Federal public sector will annually provide funds to the Secretariat of Agriculture and Livestock, in order to carry out its part of the Agreement.

The United States Department of Agriculture shall, subject to the availability of appropriations obtained from the Congress of the United States and private contributions, annually provide funds to its Animal and Plant Health Inspection Service, to enable the United States Department of Agriculture to carry out its part of the Agreement.

---

[1] Should read: (Cochliomyia hominivorax, Coquerel).

In order to carry out the earlier-mentioned program, the Governments of the United States and Mexico agree to the following:

1. To develop jointly a program of financing a screwworm eradication program to cost approximately 40,000,000 dollars. The duration of the program will be determined by the Commission which is referred to in the following paragraph.

2. To establish in Mexico City, at the earliest possible date, a joint Mexican-United States Commission for the eradication of screwworms. The Commission shall be responsible for the direction of the program to be carried out under this Agreement.

3. The Commission shall be composed of four members appointed by Mexico's Secretary of Agriculture and Livestock, four members appointed by the United States Secretary of Agriculture, a Mexican director, and a United States co-director.

4. The director and co-director shall be directly and jointly responsible for the administration of the program. The director shall be a Mexican citizen and a veterinary regulatory official appointed by Mexico's Secretary of Agriculture and Livestock.

The co-director shall be a United States citizen and a veterinary regulatory official appointed by the United States Secretary o Agriculture.

In the event the director and the co-director cannot agree with regard to the interpretation or application of the present international instrument, the matter shall be referred to the Commission. If the Commission cannot agree, the problem shall be resolved through consultations between the Secretary of Agriculture and Livestock of Mexico and the United States Secretary of Agriculture.

Plan of Operations

5. The purpose of this Agreement is to provide for the eradication of screwworms in Mexico, west of longitude 93° at the Isthmus of Tehuantepec, and the establishment of a barrier of sterile screwworm flies at that point.

6. Both Governments will provide the personnel needed to carry out this program. The selection of the professional and technical positions will be subject to the mutual and joint approval of the director and co-director.

7. The activities of the Commission will include:

(a) Developing of plans for the eradication of screwworms;

(b) Production, irradiation, and release of sterile screwworm flies;

(c) Training of personnel in the techniques of screwworm eradication;

(d) Developing and distribution of information material to livestock owners;

(e) Collection of larvae samples for laboratory identification;

(f) Investigating reports of myiasis;

(g) Modification and equipping of ships to produce sterile screwworm flies; and

(h) Conducting other appropriate activities related to screwworm eradication and prevention in the Republic of Mexico.

8. The United States Government will contribute 80 percent, and the Government of Mexico will contribute 20 percent, of the funds necessary to carry out the activities of the Commission, as identified in item 7 above.

9. The joint financing of the expenses mentioned in item 8 does not include the additional contributions which are considered in the program and which are indicated below.

The United States agrees to contribute as required for the program:

(a) Ships

(b) Planes

(c) United States Government-owned surplus equipment and parts

(d) Travel and per diem of co-director

(e) Salaries and benefits of United States personnel

(f) Administrative support costs not directly connected with the Commission.

Mexico agrees to contribute as required for the program:

(a) Fiscal exemption (duty-free entry of supplies and equipment for the program, furnished by the United States Government)

(b) Sites for placement of ships free of charges for rental, licenses, or taxes

(c) Auxiliary land necessary for a sterile fly production facility free of charges for rental, licenses or taxes

(d) Exemption from landing fees

(e) Importation permits for equipment

(f) Permits for operation of planes and vehicles free of charges for rental, licenses or taxes

(g) Mail and printed matter franking privileges

(h) Legal services

(i) Radio frequencies

(j) Quarantine, patrols, and other enforcement duties as required

(k) Duty-free entry for personal effects and household goods for United States personnel assigned to the program. The same regulations which the Government of Mexico applies to the importation of vehicles for diplomatic personnel accredited to the Embassy of the United States of America will apply to the United States personnel assigned to the Commission

(l) Salary, per diem, expenses of director

(m) Salary and benefits for personnel employed by the Mexican Government

(n) Computer service

(o) Arrangements for sites for field headquarters and dispersal center. Rent for the sites, in this case, shall be covered by the Commission

(p) Administrative support costs which are not directly connected with the Commission.

10. The Government of the Republic of Mexico will furnish legal defense in the event of litigation against the Commission and be responsible for payment of damages caused to a third party by a Commission employee while performing his duties within the terms of this Agreement. When in the opinion of the Commission an act committed by an employee of this organization is the result of serious negligence or of a deliberate action by a Commission employee, which results in a lawsuit, the Government of Mexico and the Commission will be relieved of all responsibility.

11. The salaries, benefits, per diem, and other expenditures of the director and co-director will be paid by their respective Governments. The Government which employs the nonjoint Commission personnel will pay their salaries and other benefits; their per diem will be paid by the Commission.

Salaries, benefits, and per diem of the personnel hired by the Commission will be paid by the Commission.

12. All payments shall be made jointly by a Mexican and a United States representative who must be bonded. Such personnel will be designated by and all payments verified by the director and co-director.

13. For the employees paid from joint funds, the United States Government will pay 80 percent of the established wage for the first 48 hours of work performed each week.

The Mexican Government will assume responsibility for all other Mexican labor obligations called for under Mexican labor laws and regulations and will carry out any labor negotiations that are deemed necessary.

14. The Commission, because of its international character, shall develop and adopt the internal systems and regulations that it considers suitable for the proper performance of its functions in accordance with the problems and circumstances under which it operates.

15. The communications or requests to the civil or military Mexican authorities will be requested by the representatives of the Mexican Government on the Commission, based on internal memoranda of the Commission, properly signed by the director and co-director or their representatives.

16. The director and co-director shall have full authority to request to their respective Governments the recall of any employee of the program.

17. The Government of Mexico will facilitate immigration requirements for the entry into and the exit from the country of the United States personnel participating in the program.

18. Officials and employees of the United States Department of Agriculture participating in the program shall enjoy the exemptions provided in Articles III(2) and IV(2) of the 1942 Consular Convention between Mexico and the United States. [1]

19. Communications, regulations, and instructions pertaining to operations under this Agreement shall be issued by the director and co-director or their designated representatives.

20. The United States equipment shall be shipped directly to the Commission which will make all the necessary arrangements for shipping from the border to its final destination.

21. The acquisition of the equipment and supplies which are required for the program should meet the criteria established by the Commission and be Mexican-made, if they can be bought under similar economic conditions and in an equal or shorter amount of time than similar imported goods.

22. At the end of the program, the Commission will maintain an effective screwworm-sterile-fly barrier zone to prevent screwworm infestation.

23. This Agreement shall remain in force until 90 days after either Government shall have given a written notice to the other of its intent to terminate the Agreement. In the event of termination of this Agreement, any funds remaining unobligated will be returned to the respective Governments in the same percentages as they were contributed. Equipment will be returned to the country furnishing it. Proceeds from the sale of jointly purchased equipment will be returned to each Government in accordance with the proportion contributed.

24. This Agreement shall enter into force on the date on which notes are exchanged between the two Governments confirming its provisions.

DONE at Mexico City in duplicate, in the Spanish and English languages.

August 28, 1972

EARL L. BUTZ

Earl L. Butz,
Secretary of Agriculture of the United States

August 28, 1972

M B AGUIRRE

Manuel Bernardo Aguirre,
Secretary of Agriculture and Livestock of Mexico

[1] TS 985; 57 Stat. 805.

ACUERDO ENTRE EL GOBIERNO DE LOS ESTADOS UNIDOS DE AMERICA Y EL GOBIERNO DE LOS ESTADOS UNIDOS MEXICANOS PARA LA ERRADICACION DEL GUSANO BARRENADOR DEL GANADO

El propósito de este Acuerdo es establecer un programa conjunto en la República Mexicana con el fin de erradicar al gusano barrenador del ganado (Cochliomyia Hominivorax, Coquerel) en la región de México que está al Norte y al Oeste del punto más estrecho del Istmo de Tehuantepec, y establecer ahí una barrera con moscas estériles del gusano barrenador, cuyo propósito será la protección de las regiones de México que hayan quedado libres de infestación de esa plaga. La Secretaría de Agricultura y Ganadería de México por conducto de la Subsecretaría de Ganadería, y el Departamento de Agricultura de los Estados Unidos de América por conducto del Servicio de Inspección y Sanidad de Animales y Plantas, participarán en este Acuerdo de conformidad con las leyes respectivas.

La Ley del 28 de febrero de 1947, misma que ha sido reformada (21 U.S.C. 114b, 85 Stat. 418) autoriza al Departamento de Agricultura de los Estados Unidos de América a cooperar con México para erradicar al gusano barrenador del ganado en este país. Con fundamento en dicha Ley, misma que ha sido reformada, el Servicio de Inspección de Sanidad de Animales y Plantas llevará a cabo trabajos cooperativos con la Subsecretaría de Ganadería de México.

El Gobierno de México, sujeto al Presupuesto de Egresos del Sector Público Federal, proporcionará anualmente fondos a la Secretaría de Agricultura y Ganadería para que pueda cumplir la parte que le corresponde de este Acuerdo.

El Gobierno de los Estados Unidos de América, sujeto a la disponibilidad de sumas asignadas por el Congreso de los Estados Unidos, y de contribuciones particulares, proporcionará anualmente fondos a su Servicio de Inspección y Sanidad de Animales y Plantas para que el Departamento de Agricultura de los Estados Unidos cumpla con la parte que le corresponde del Acuerdo.

Con el fin de realizar el programa antes mencionado, los Gobiernos de los Estados Unidos de América y de México acuerdan lo siguiente:

1. Elaborará conjuntamente un programa de inversiones para la erradicación del gusano barrenador del ganado que costará aproximadamente 40.000.000 de dólares americanos. La duración del programa será determinada por la Comisión a que se alude en el párrafo siguiente.
2. Establecer en la Ciudad de México, a la mayor brevedad posible, una Comisión Conjunta Estados Unidos-México para la erradicación del gusano barrenador del ganado. La Comisión será responsable de la dirección del programa que se llevará a cabo bajo este Acuerdo.
3. La Comisión estará integrada por cuatro miembros designados por el Secretario de Agricultura y Ganadería de México, y por cuatro

miembros designados por el Secretario de Agricultura de Estados Unidos de América, un director Mexicano y un co-director Estadounidense.

4. El director y el co-director serán mancomunada y directamente responsables de la administración del programa. El director será un médico veterinario titulado, de nacionalidad mexicana, designado por el Secretario de Agricultura y Ganadería de México.

El co-director será médico veterinario autorizado, de nacionalidad norteamericana, designado por el Secretario de Agricultura do los Estados Unidos de América.

En el caso de que el director o el co-director no puedan llegar a un acuerdo con respecto a la interpretación o aplicación del presente instrumento internacional, el asunto será referido a la Comisión. Si la Comisión no puede llegar a un acuerdo, el problema se resolverá a través de consultas entre los Secretarios de Agricultura de México y de los Estados Unidos de América.

Plan de Operaciones

5. Este Acuerdo tiene como propósito la erradicación del gusano barrenador del ganado en México, al Oeste del meridiano 93° en el Istmo de Tehuantepec, y la formación de una barrera con moscas estériles en ese punto.

6. Ambos Gobiernos proporcionarán los servicios del personal necesario para llevar a cabo este programa. La selección de personal profesional y técnico estará sujeta a la aprobación del director y del co-director, en forma conjunta.

7. Entre las actividades de la Comisión estarán los siguientes:

(a) Elaboración de planes para la erradicación del gusano barrenador del ganado;

(b) Producción, radiación y dispersión de moscas estériles del gusano barrenador del ganado;

(c) Entrenamiento de personal en la técnica de la erradicación del gusano barrenador del ganado;

(d) Elaboración y distribución de material informativo a los ganaderos;

(e) Colección de muestras de larvas para su identificación en el laboratorio;

(f) Investigación de reportes de miasis;

(g) Acondicionamiento y equipamiento de barcos para la producción de moscas estériles del gusano barrenador del ganado;

(h) Realización de otras actividades apropiadas relacionadas con la erradicación y la prevención del gusano barrenador del ganado en la República Mexicana.

8. El Gobierno de los Estados Unidos de América contribuirá con 80 por ciento y el Gobierno de México contribuirá con 20 por ciento de los fondos necesarios para llevar a cabo las actividades de la Comisión, conforme están identificadas en el punto 7.

9. El financiamiento mancomunado de los gastos mencionados en el punto 8 no incluye las aportaciones adicionales que también están consideradas en el programa y que a continuación se señalan:

Los Estados Unidos de América están de acuerdo en contribuir cuando sea requerido por el programa con:

(a) Barcos

(b) Aviones

(c) Equipo y repuestos excedentes, propiedad del Gobierno de los Estados Unidos

(d) Gastos de viaje y viáticos del co-director

(e) Salarios y bonificaciones para el personal norteamericano

(f) Gastos administrativos de apoyo que no están conectados directamente con la Comisión.

México está de acuerdo en contribuir cuando sea requerido por el programa con:

(a) Exención fiscal (entrada libre de derechos de efectos y equipo para el programa proporcionados por el Gobierno de los Estados Unidos)

(b) Espacio para la colocación de barcos, libre de cargos por concepto de rentas, licencias, impuestos

(c) Terrenos auxiliares necesarios para proporcionar facilidades para la producción de moscas estériles del gusano barrenador del ganado, libre de cargos por concepto de rentas, licencias, impuestos

(d) Exención del pago de tarifas de aterrizaje

(e) Permisos para la importación del equipo

(f) Permisos para el uso de aviones y vehículos, libres del pago de rentas, licencias, impuestos

(g) Franquicia de correspondencia y material impreso

(h) Servicios legales

(i) Frecuencias de radio

(j) Cuarentenas, patrullas y otras actividades de vigilancia que se requieran

(k) Entradas con franquicia para los efectos personales y menaje del personal estadounidense asignado al programa. Las mismas disposiciones que aplica el Gobierno de México a la importación de vehículos para el personal diplomático acreditado en la Embajada de Estados Unidos de América, serán aplicadas al personal estadounidense asignado a la Comisión

(l) Salario, viáticos y gastos del director

(m) Salarios y prestaciones para los empleados contratados por el Gobierno mexicano

(n) Servicio de computación

(o) Acondicionamiento de centros de operación en el campo y centro de dispersión. La renta de los locales, en este caso, será cubierta por la Comisión

(p) Gastos administrativos de apoyo que no estén directamente conectados con la Comisión.

10. El Gobierno de los Estados Unidos Mexicanos proporcionará defensa legal en casos di litigio contra la Comisión y se hará responsable del pago de los daños que se causen a terceros por algún empleado de la Comisión en el cumplimiento de las tareas que le sean confiadas en los términos de este Acuerdo. Cuando en opinión de la Comisión algún acto cometido por un empleado de este organismo, sea resultado de negligencia grave o de una acción deliberada que tenga como resultado un litigio, el Gobierno de México y la Comisión quedarán liberados de toda responsabilidad.

11. Los salarios, prestaciones, viáticos y demás gastos del director y el co-director serán pagados por sus respectivos Gobiernos. El Gobierno que contrate al personal participante que no sea de la Comisión, pagará sus salarios y otras bonificaciones; sus viático serán pagados por la Comisión.

Los sueldos, pretaciones y viáticos del personal contratado por la Comisión serán pagados por ésta.

12. Todos los pagos serán hechos mancomunadamente por un representante Mexicano y otro de los Estados Unidos de América, quienes deberán contar con la correspondiente fianza. Dicho personal lo designará el director y el co-director y todo pago será verificado por éstos.

13. Para los empleados pagados del fondo mancomunado, el Gobierno de los Estados Unidos cubrirá el 80 por ciento del salario establecido para las primeras 48 horas del trabajo ejecutado cada semana.

El Gobierno Mexicano asumirá la responsabilidad de todas las demás obligaciones laborales requeridas bajo la Ley Laboral y los Reglamentos Mexicanos y efectuará cualesquier negociaciones laborales que se estimen sean necesarias.

14. La Comisión, debido a su carácter internacional, desarrollará y adoptará los sistemas internos y los reglamentos que considere apropiados para el mejor desempeño de sus funciones de acuerdo con los problemas y las circunstancias bajo las cuales opere.

15. Las comunicaciones o peticiones a las autoridades civiles o militares de México serán hechas por los representantes del Gobierno mexicano en la Comisión, basándose en memoranda internos de la Comisión, debidamente firmados por el director y el co-director o sus representantes.

16. El director y el co-director tendrán plena autoridad para pedir a sus respectivos Gobiernos el retiro de cualquier empleado del programa.

17. El Gobierno de México facilitarà los trámites migratorios para la entrada y salida del país del personal de los Estados Unidos que preste sus servicios en el programa.

18. Los funcionarios y empleados del Departamento de Agricultura de los Estados Unidos de América que presten sus servicios en el programa

gozarán de las franquicias estipuladas en los Artículos III(2) y IV(2) de la Convención Consular de 1942 entre México y los Estados Unidos.

19. Las comunicaciones, reglamentos o instrucciones sobre las operaciones que se lleven a cabo bajo este Acuerdo, se emitirán por el director y el co-director o sus representantes autorizados.

20. El equipo norteamericano será enviado directamente a la Comisión la que se encargará de hacer todos los arreglos necesarios para su traslado desde la frontera hasta el punto de su destino.

21. La adquisición del equipo y los materiales que se requieren para el programa se harán conforme al criterio establecido por la Comisión siendo de fabricación mexicana, si los mismos pueden ser comprados en similares condiciones económicas y en un lapso igual o más corto que productos similares importados.

22. Al término del programa, la Comisión mantendrá una barrera eficaz de moscas estériles del gusano barrenador del ganado para prevenir la infestación del mismo.

23. Este Acuerdo tendrá vigencia hasta 90 días después de que uno de los Gobierno haya dado notificación por escrito al otro de su intención de terminar el Acuerdo. En caso de la terminación de este Acuerdo, los fondos sobrantes serán regresados al Gobierno respectivo en los mismos porcentajes en que fueron aportados. El equipo será regresado al país que lo proporcionó. El producto de la venta del equipo comprado mancomunadamente será devuelto a cada Gobierno de acuerdo con la proporción en que contribuyó.

24. Este Acuerdo entrará en vigor en la fecha en que se intercambien Notas entre ambos Gobiernos mediante las cuales se confirman sus disposiciones.

Hecho en la Ciudad de México, en duplicado, en los idiomas inglés y español

Tlatelolco, D. F., *28 de agosto de 1972.*

Earl L. Butz	M B Aguirre
Earl L. Butz *Secretario de Agricultura de los Estados Unidos de América*	Manuel Bernardo Aguirre *Secretario de Agricultura y Ganadería de México*

U.S. GOVERNMENT PRINTING OFFICE: 1972

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
VETERINARY SERVICES
FEDERAL CENTER BUILDING
HYATTSVILLE, MARYLAND 20782

Dr. Bushland
Mission, Texas
B

January 24, 1973

Subject: Joint APHIS-ARS Methods Development - Research Field Study in Northeastern Mexico

To: J. L. Hourrigan
Senior Staff Veterinarian
Sheep, Goat, Equine, and Ectoparasites

During the week of January 8-13, 1973, Dr. Bushland, Dr. Meadows, and I discussed the plans and priorities for this work in Northeastern Mexico and agreed on the following:

First Objective--To monitor the effectiveness of the Mexican sterile fly release program this winter.

This should be done in areas of heaviest infestation between Valles and the mountains. According to Mr. Thomas "Bud" Fisher, this area is the heaviest breeding area.

This will be done jointly by Methods Development and ARS using test pens and also by collecting egg masses from cooperating ranches and collecting egg masses from official tick-dipping checkpoints.

At all times there will be a competent entomologist to classify all egg masses collected as sterile or fertile.

We agreed that we need 70 percent sterility or better in order to achieve desired success.

Another area to be tested simultaneously will be a coastal area around Aldama. This area is historically one of the worst screwworm areas in the Mexican fly release zone. Aldama egg masses can be checked at Tampico or Cd. Mante.

Reason this is the first objective: Attainment of this goal will give us a 2-month forewarning of what will happen in Texas.

Second Objective--To evaluate the current plant strain in comparison with the new Texas strain, which was selected from 18 Texas ranches. Two 2500 square-mile areas (50 X 50 square miles) will be used to test these two strains. One of these areas can be near the Aldama area and the other near Ocampo. At least three test pens will be set up in each area to serve as egg mass collection points. A Mexican strain may be tested later.

Third Objective--To determine whether the new entomological synthetic bait will attract both released flies established in nature as well as native Mexican flies to the trap. Will the new lure attract both males and females? Although this is third priority, this is something we can do now.

This combines with the first and second objective, and the third objective may be completed first. Mr. Jack Graham's advice is necessary to locate trap sites, but ARS people will do the bulk of the work.

Prior travel restriction on Mission, Texas, personnel limiting their travel to northern border States in Mexico must be relieved so Mission personnel can travel.

The above items must be completed in 60-90 days.

If it becomes necessary to request the services of several APHIS inspectors now assigned to Mexico, they should give top priority to these special studies.

After the above three high-priority items are completed, the following studies can be carried out later:

1. Swath width
2. Loading rates in fly release cartons
3. Fly feeding versus no feeding in release boxes
4. Large versus small fly release cartons

Dr. Bushland is assigning 3 ARS scientists and 2 bilingual technicians to this work. A minimum of 2 ARS scientists and 1 technician will be on site in Mexico as long as this special work continues.

In addition to the personnel from Mission who will be directing operations at the Tampico sterile fly distribution center, Dr. Meadows is committing the services of at least 1 entomologist and 1 technician from Mission to collaborate with ARS personnel in this endeavor.

All egg masses will be classified as fertile or sterile in the field and not sent by mail to Mexico City or Mission for determination.

Donald L. Williams
Chief Staff Veterinarian
Screwworm Eradication

Dr. A.A.Heflin, Mexico City
Dr. N.L.Meyer, APHIS-EP, Hyattsville
Dr. J.L.Wilbur, APHIS-VS, Hyattsville

cc:
Dr. Lyman Henderson, ARS, Beltsville, Md.
Dr. R. C. Bushland, ARS, Mission, Texas
Dr. M. E. Meadows, APHIS-VIC, Mission, Texas

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Dr. A.A.Herlin, Mexico City
Dr. N.L.Meyer, APHIS-EP, Hyattsville
Dr. J.L.Wilbur, APHIS-VS, Hyattsville

cc:
Dr. Lyman Henderson, ARS, Beltsville, Md.
Dr. R. C. Bushland, ARS, Mission, Texas
Dr. M. E. Meadows, APHIS-VIC, Mission, Texas

Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

January 30, 1973

Subject: Joint APHIS-ARS Development--Research Field Study in Northeastern Mexico

To: E. A. Taylor
Area Director
USDA, ARS, Southern Region
Weslaco, Texas 78596

Attached is a copy of Dr. Williams' memorandum to Dr. Hourrigan summarizing the agreement that Dr. Williams, Dr. Meadows, and I reached regarding our cooperative work in Mexico.

I have attached extra copies of this material in case you would wish to inform New Orleans.

R. C. Bushland
Research Leader

Enclosures

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UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
Screwworm Research Laboratory
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Mission, Texas 78572

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Enclosures

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AGRICULTURAL RESEARCH SERVICE
Screwworm Research Laboratory
P. O. Box 958
Mission, Texas 78572

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3/6/73 2:15 pm

Dr. Bushland called and said:
He is flying to Tampico on the week of the 13th and will be there all week going over all of the research work there with the people. He will be back possibly on Saturday. He will be in the office on Monday the 12th only.

This week he is expecting a group from Mexico and will be tied up with conferences on 7th, 8th, and 9th. This group is the Committee for eradication of screwworm in Mexico and is here to work out plans for the Mexico eradication part. Dr. Bushland said he could be reached at any time these days--to call Thelma and she would find him.

He also stated that he had gotten a call from Mr. George in New Orleans advising him that $30,000 had been made available from ~~Kxxxxxxx~~ Edminster's funds for the screwworm research. (He stated that this was the $100,000 that you had requested but that only $30,000 had been granted---I don't think this is right). Mr. George stated that the existing Cooperative AGreement with INIA expires in Sept. 1974 and that it can not be extended anymore as these contracts run only on a 4 year basis, after that, new contracts have to be negotiated. But Dr. Bushland would like to suggest that these $30,000 be set up as follows: that only $10,000 be put in the INIA agreement because he is not happy with their work in Cotaxtla. He said that at the San Antonio meeting, that Dr. Graham talked to them and they promised that as soon as they got back from the meetings that they would move up to Tampico and start to work there. They have not done anything on the move yet and have done nothing to expend their activities. That the reason they give for not going ahead is that they want something in writing from Mr. Taylor or someone higher up to the effect that they will be guaranteed that money will be made available to them through Sept. 1974--they are worried about their salaries. Dr. Bushland wanted them to set up sheep pens and get them running in Tampico but they do not want to expend any money on this until they are guaranteed in writing that money will be available thru 9/74. So Dr. Bushland and Dr. Graham are a little disappointed in them and they said that they need data from them urgently and they have not been able to get it.

The balance of $20,000 Dr. Bushland would like to start a Cooperative AGreement with the Technical Institute in Monterrey. He feels that they have some very good people there and would like to work with them.

The above proposal for use of the $30,000 is for your consideration. Mr. George might call you on this requesting how to set up these funds.

(over)

Dr. Bushland also requested that you be informed that they had collected 13 egg masses--7 were fertile and 6 were sterile. They were a little disappointed in the results.

Juanita

U.S. DEPARTMENT OF AGRICULTURE

REFERENCE SLIP

DATE 4/2/75

TO

L. S. Henderson

- [ ] ACTION
- [ ] NOTE AND RETURN
- [ ] APPROVAL
- [ ] PER PHONE CALL
- [ ] AS REQUESTED
- [ ] RECOMMENDATION
- [ ] FOR COMMENT
- [ ] REPLY FOR SIGNATURE OF
- [x] FOR INFORMATION
- [ ] RETURNED
- [ ] INITIALS
- [ ] SEE ME
- [ ] NOTE AND FILE
- [ ] YOUR SIGNATURE

REMARKS

Edgar A Taylor

FROM Subtropical Texas Area
Southern Region
Weslaco, Texas

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UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

March 23, 1973

Subject: Screwworm Research--Tampico Area

To: E. A. Taylor, Area Director
Subtropical Texas Area
Weslaco, Texas 78596

Our Mission staff has been actively conducting field research in Mexico since January 9 when the APHIS Distribution Center opened. Dr. O. H. Graham has been there almost continuously, returning to Kerrville only twice for one-week breaks. In addition, we have had continuously on duty in Mexico one or two other entomologists and from one to three technicians.

The Tampico area work is conducted in cooperation with the Methods Development Section of APHIS with one or two entomologists from the APHIS staff working with our team at Tampico.

Highest priority has been given to measuring the effectiveness of sterile fly releases on the basis of percentage sterile egg masses collected from trap animals. Three pens were set up and stocked with wounded and artificially infested sheep at locations between Tampico and Aldama. Freshly castrated cattle were observed on ranches closer to Tampico near the town of Altamira. The majority of egg masses have come from castrated cattle.

The first egg mass was collected on February 15, and from then until March 21, we have accumulated the following data: 21 fertile egg masses and 18 sterile egg masses plus 16 cases of newly hatched larvae, representing masses laid and hatching during the interval between daily inspections. The accumulative total represents 55 egg masses with 18 sterile, for an average of 33% sterility.

It is generally agreed that screwworms increase about 5-fold each generation in the spring months when weather is favorable. Thus 80% sterility is required merely to keep a screwworm population from increasing. With the present rate of sterility, I expect screwworms to double or triple in numbers near Tampico in the four or five weeks required for a new generation at this time of year.

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Our group has established a screwworm trap line extending inland from the coast near Aldama. Flies were not active in the cold weather of January and early February, but catches have increased recently. During one trapping period, February 28 to March 7, a total of 2461 female screwworm flies were collected. Mr. Eddy rechecked the determinations made by our technicians and found only 8 wild screwworms. This ratio of over 300 sterile to one wild fly trapped suggests that overwhelming numbers of sterile flies are being released. However, they are not mating competitively since only about 1/3 of the wild females are mating with sterile males on the basis of our egg mass data.

Dr. Meadows and his associates have been very concerned about the Tampico results. I am attaching a copy of a letter he wrote to Dr. Wilbur on March 13 with which he included a statement from me. I am happy to report that he secured permission to increase the fly holding space to accommodate the ARS strain as he requested. That expansion is now under way, and I am hopeful that our new ARS strain can be increased rapidly and will prove effective in field tests we will conduct jointly with APHIS as soon as the expanded plant can rear sufficient numbers to treat a 2500 square mile area.

RC Bushland

R. C. Bushland
Research Leader

Enclosures

cc: E. A. Taylor, duplicate
M. E. Meadows, APHIS

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cc: E. A. Taylor, duplicate
H. E. Meadows, APHIS

Mr Taylor
Weslaco, Tex

Eg

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
SOUTHERN REGION
701 LOYOLA AVENUE
P. O. BOX 53326
NEW ORLEANS, LOUISIANA 70153

RECEIVED
MAR 27 1973
AREA OFFICE
WESLACO, TEXAS

March 23, 1973

Subject: Screwworm Activity in Mexico

To: T. W. Edminster, Administrator

I telephoned Dr. R. C. Bushland this week to see if he will be able to attend a meeting on screwworm that APHIS is holding in Puerto Rico. Inasmuch as he had just returned from Mexico, I asked for an up-date on our research to overcome the problems that occurred in the operational program last year.

Dr. Bushland reported on two study sites, one near Tampico, where the weather was cold during January and no flies were found. Observations have been made on wounded sheep and castrated bull calves in an area where sterile flies are being released at the rate of 3200 per square mile per week. Between February 15 and March 16, they found 51 egg masses but only 30 percent were sterile. Dr. Bushland pointed out that it takes 80 percent sterility for a population to remain static. A 30 percent level of sterility will result in a two- to three-fold population increase in one generation.

Dr. Bushland expressed concern that the "new" strain, which is being reared and released, is still deficient. He told me about a new ARS strain which is more vigorous and lives twice as long as the current stock strain. However, they have to hold it 10 days instead of 5 days before egging and it only lays half as many eggs. Therefore, it will require four times as much space in the production colony when APHIS decides to use it. The APHIS Methods Development group is currently producing it at the rate of 100,000 per week but it would require three million per week if used to produce flies for the operational program. Dr. Bushland noted that APHIS is putting $109,000 into building new rearing space for

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AGRICULTURAL RESEARCH SERVICE
SOUTHERN REGION
701 LOYOLA AVENUE
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NEW ORLEANS, LOUISIANA 70153

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the super wild ARS strain but I gather that he is worried that it may not be ready in time to prevent a recurrence of last year's outbreak. He did say that, because of the emergency nature of the problem, APHIS personnel have worked weekends to get plans and specifications ready and have been given authority to proceed without benefit of bids.

H C Cox
Associate Deputy Administrator

cc:
L. S. Henderson, NPS, Beltsville, Md.
R. C. Bushland, Mission, Texas
E. A. Taylor, Weslaco, Texas

the super wild ARS strain but I gather that he is worried that it may not be ready in time to prevent a recurrence of last year's outbreak. He did say that, because of the emergency nature of the problem, APHIS personnel have worked weekends to get plans and specifications ready and have been given authority to proceed without benefit of bids.

B C Cox
Associate Deputy Administrator

cc:
D. S. Henderson, NPS, Beltsville, Md.
R. C. Bushland, Mission, Texas
E. A. Taylor, Weslaco, Texas

4 APR 1973

copy for mission + for Weslaco

Bush -

This office memo prepared by Dr. Carrillo merely confirms for the record our conversation in San Antonio - Taylor, Carrillo, Velazco, you and me - in which we asked for a revised budget that would be based on proposed coop. program for Tamaulipas -

We urgently need the letter from Taylor to Dr. Cardenas that I mentioned to you when you visited Tampico - a simple official request that they work with us in Tamaulipas and other northern states instead of at Cotaxtla -

Hugh

INST.NAL. DE INVEST.AGRICS.
DEPTO. DE ENTOMOLOGIA
603.33

Se informa sobre entrevista con funcionarios del Departamento de Agricultura de los E.U.A.

Chapingo, Méx. a 19 de febrero de 1973.

Dr. Francisco Cárdenas M.
Director General
P r e s e n t e.

Durante la última reunión de la Rama Gurcesta de la Sociedad Entomológica de América que se llevó a cabo en San Antonio, Texas, EUA, fuí invitado a una entrevista para delinear planes preliminares de trabajo en relación al convenio que se establecerá proximamente entre el Departamento de Agricultura de los Estados Unidos (DAEU) y el INIA, sobre el gusano barrenador del ganado en areas de la costa del Golfo de México. Estuvieron presentes en esta reunión el Dr. E.A. Taylor, Dr. O.H. Graham, Dr. R.S. Bushland, funcionarios de DAEU e Ing. Hermenegildo Velazco, Coordinador del Programa de Entomología del CIAEE, además del suscrito.

ANEXO

A petición de los funcionarios citados, el Ing. Velazco preparó un presupuesto tentativo sobre los gastos mínimos que serán necesarios para iniciar esos trabajos, el cual me permito enviar al presente, en la inteligencia de que se incluyen conceptos que pueden modificarse una vez que se apruebe el subsidio correspondiente por las autoridades del DAEU.

En esta entrevista se hizo hincapié en la necesidad de contar con un vehículo nuevo para la realización de los trabajos en el Sur de Tamaulipas, y dada la imposibilidad de que el DAEU proporcione el vehículo, o de que se autorice la compra en una sola exhibición al efectuarse los informes correspondientes al convenio, se sugirió que el INIA compre ese vehículo y

gradualmente, en los informes trimestrales que rinda el INIA, se cargue una cantidad por concepto de renta de vehículo, calculado en todos sus aspectos (gasolina, lubricantes, refacciones, depreciación etc.) en base a un cierto kilometraje recorrido por trimestre.

Por otra parte, dado que de autorizarse el nuevo convenio no se contaría con los fondos correspondientes antes del próximo mes de julio, se sugiriá también que los trabajos se inicien inmediatamente, utilizando parte de los fondos que todavía quedan del convenio vigente a la fecha.

A solicitud de los funcionarios del DAEU presentes en la entrevista me he permitido poner bajo su conocimiento los principales aspectos discutidos en la misma, para que si juzga Ud. conveniente, gire instrucciones a quien corresponda con objeto de que estos trabajos se lleven a cabo.

A T E N T A M E N T E
SUFRAGIO EFECTIVO. NO REELECCION
JEFE SEC. CONTROL BIOLOGICO

José L. Carrillo S.

DR. JOSE L. CARRILLO S.

c.c.p. al C. Subdirector Técnico.-Presente
c.c.p. al C. Subdirector Admvo.-Presente
c.c.p. al C. Jefe Depto. Entomología.-Presente
c.c.p. al C. Coordinador del Prog. de Entomología en el CIASE
c.c.p. al C. Dr. C.M. Graham, P.O. Box 232, Kerrville, Tex. 78028, E.U.A.

JLCS'jsm.

GASTOS PROYECTO CUBANO DARRENADOR MARZO 1973 -
MARZO 1974 PROYECTO COOPERATIVO INIA.-ARS,USDA

Presupuesto Mensual

PERSONAL

Técnico- -	$ 400.00
Ayudante- -	160.00
Ayudante- -	160.00
Ayudante- -	160.00
Ayudante- -	160.00
Secretaria- -	160.00
TOTAL	$ 1,200.00

GASTOS DE VEHICULOS

Renta- -	320.00
Gasolina y lubricantes- -	80.00
Refacciones y mano de obra- -	40.00
TOTAL	$ 440.00

MATERIAL DE LABORATORIO

Hígado de res- -	200.00
Alimento para borregos- -	240.00
Substancias químicas y otros- - - - - - - - - - - - - - - - - - - -	60.00
TOTAL	$ 480.00

COMPRA DE BORREGOS- -	$ 80.00

R E S U M E N

POR MES- - - - - - - - - - - - - - - - - -	$ 2,210.00
POR TRIMESTRE- - - - - - - - - - - - - - -	$ 6,630.00
POR AÑO- - - - - - - - - - - - - - - - - -	$26,520.00

Nota: En la actualidad existen aprobados para año y medio aproximadamente $ 21,000.00.

Todas las cantidades están citadas en dólares.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

April 10, 1973

Subject: Screwworm Research--Tampico Area

To: E. A. Taylor, Area Director
Subtropical Texas Area
Weslaco, Texas 78596

On March 23 I sent you my first report on our field work near Tampico being conducted jointly with the Methods Development Section of APHIS at Mission.

The Screwworm Eradication Program has shifted fly release area boundaries northward because of the occurrence of infestations in Texas. On March 28 APHIS Field Operations made their last release south of Tampico. Since that date the southern limit of release is at the latitude of Tampico.

Because our egg mass collecting stations are so close to the southern boundary of sterile fly releases, I cannot interpret fertile egg mass records made after April 7. Fertile flies could emerge and mate south of Tampico and fly into the release zone to oviposit. The sterile males dropped on March 28 would have been old enough to mate with wild flies on March 31. The sterile male population south of Tampico would decline without additional releases in Mexico, but the wild flies ovipositing through April 7 should have been adequately exposed to sterile males. Therefore, I have tabulated all the egg mass records from the first collection made on February 15 to the end of last week. The table is attached.

Dr. Graham is continuing the egg mass records this week, but I will not know whether any fertile egg masses represent migrating flies or those that mated in the release area. (However, on April 9, he collected 2 egg masses and both were sterile.)

You will note in the attached table that the total number of egg masses from both cattle and sheep was 96 and that the sterility was exactly 50 per cent.

I mentioned in my earlier letter that Dr. Knipling and I have always proposed that, in the favorable weather of spring, screwworm populations

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I mentioned in my earlier letter that Dr. Knipling and I have always proposed that, in the favorable weather of spring, screwworm populations

increase at a rate of about 5-fold each generation. If we are right in that assumption, then 80 per cent sterility is required to merely keep a population from increasing during the spring months.

Since the Tampico observations indicate only 50 per cent sterile matings, I would expect the population to double in the Tampico area during the next month even though releases were continued at the same rate. As we cannot get valid data at the extreme end of the Tamaulipas release area, we need continuing records from further north. Therefore, working with the help of APHIS inspectors, we are establishing new trapping sites and egg mass collecting locations in the general area of the highway from Victoria to La Pesca. Our technicians have started collecting eggs from castrated cattle near Soto La Marina and La Concepcion. (Two weeks ago our technician collected 5 sterile and no fertile egg masses from a ranch near Soto La Marina. Last week the weather was unsuitable (windy, cool and rainy) for fly activity and no eggs were collected.)

I hope that the wild fly population in northern and central Tamaulipas will be sufficiently low to be overwhelmed by mating competition from sterile flies. We are making every effort to get valid data. In the meantime, I am worried about the inadequate mating competitiveness of the released flies. Mr. Eddy's spot checks of trapped flies indicate that wild flies in the Tampico area were outnumbered 300 to 1 during the period March 1-7 and about 1000 to 1 March 15 to 21.

The trapping records compared with the egg mass data indicate that an abundance of sterile flies were released in March, but they were not adequately competitive in their mating with wild flies.

R. C. Bushland

R. C. Bushland
Research Leader

cc: In duplicate--for your forwarding to Dr. Cox
Dr. Villasenor
Dr. Meadows
Dr. Graham
Dr. Henderson
Dr. Klassen

Forwarded to Dr. Cox Jamaica

increase at a rate of about 5-fold each generation. If we are right in that assumption, then 80 per cent sterility is required to merely keep a population from increasing during the spring months.

Since the Tampico observations indicate only 30 per cent sterile matings, I would expect the population to double in the Tampico Area during the next month even though releases were continued at the same rate. As we cannot get valid data at the extreme end of the Tamaulipas release area, we need continuing records from further north. Therefore, working with the help of APHIS inspectors, we are establishing new trapping sites and egg mass collecting locations in the general area of the highway from Victoria to La Pesca. Our technicians have started collecting eggs from sacrificed cattle near Soto La Marina and La Concepcion. (Two weeks ago our technicians collected 5 sterile and no fertile egg masses from a ranch near Soto La Marina. Last week the weather was unsuitable (windy, cool and rainy) for fly activity and no eggs were collected.)

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EGG STERILITY RECORDS -- TAMPICO AREA--1973

Week Ending	Egg Masses Collected From: Sheep Fertile	Sheep Sterile	Cattle Fertile	Cattle STerile	Total Masses Fertile	Total Masses Sterile
Feb 17	0	0	3	2	3	2
24	0	2	1	2	1	4
Mar 3	3	0	0	0	3	0
10	2	4	7	3	9	7
17	1	2	19	2	20	4
24	0	2	2	2	2	4
31	0	5	0	4	0	9
Apr 7	1	6	9	12	10	18
Total	7	21	41	27	48	48

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31	0	5	0	4	0	9
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201

Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

April 17, 1973

Subject: New Trap Lines and Animal Pens in Mexico

To: Dr. D. L. Williams
Chief Staff Veterinarian
USDA, APHIS, Screwworm Eradication
Hyattsville, Maryland 20782

The closing of the Tampico Distribution Center and shortening of the drop zone requires that we establish a new study area in Tamaulipas. Dr. Graham is continuing twelve traps in the old Tampico trap line and will also continue egg mass observations on a reduced scale in our old research area to note changes in fly populations, but our cooperative APHIS-ARS joint study area must be moved from the latitude of Tampico to that of Victoria which we hope will be more or less permanently in the drop zone.

We plan that by April 30 we will have a trap line extending eastward from Victoria to Soto la Marina and the coast. Also we will have animal pen locations under development near the coast and near the mountains in addition to the present pens near Soto la Marina. I think it especially important that we establish egg mass collecting areas near the coast and in the foothills to get a better idea of fly sterility there.

I understand that Mr. Corristan told Dr. Meadows that our technician, Mr. Frank Gonzalez, collected four egg masses at Soto la Marina last week and two were fertile. This morning, Dr. Graham told me over the telephone that Mr. Gonzalez had collected six egg masses over the weekend at Soto la Marina and five were fertile. At two other ranches near there, he has been observing many castrated cattle and has collected no egg masses. We definitely need more collection sites to know what is happening.

I have talked with Dr. Meadows, and he has no commitments through the period April 30 to May 5. We hope that you can fly here Sunday, April 29, in order to leave with us early Monday morning to survey the area and complete arrangements for our data gathering. Since we have a lot of territory to cover, we will need the whole week. If it would not be too inconvenient for you, I would like to stay in Mexico at least through Friday and return to McAllen on Saturday or Sunday.

R. C. Bushland
Research Leader

cc: E. A. Taylor
M. E. Meadows

RECEIVED
APR 18 1973
AREA OFFICE
WESLACO, TEXAS

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R. C. Bushland
Research Leader

cc: R. A. Taylor
M. E. Meadows

Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

April 17, 1973

Dr. W. G. Eden
Institute of Food and Agricultural Sciences
University of Florida
3103 McCarty Hall
Gainesville, Florida 32601

Dear Dr. Eden:

This concerns your letter of April 3 and my telephone call to you of April 9 regarding the FAO/IAEA Training Course. Since I have seen in copies of correspondence from New Orleans that Dr. Cooper had given advance approval to my participation, I am sure that the dates of July 30 and 31 are satisfactory.

I mentioned over the telephone that the title assigned for my first talk on July 30, "Screwworm Eradication," is o.k. The title for my second talk should be amended to read "Review of Eradication Problems." The second part of that title, "Current Research in the Fargo Laboratory," will be more properly handled by Dr. LaChance who is scheduled to speak earlier.

You mentioned over the telephone that you could Xerox reprints so that I could give each member of the class a copy. For use in connection with my first lecture, I am sending my paper "Sterility Principle for Insect Control--Historical development and recent innovations," which was published by the IAEA in 1971. In my second talk, I will review two very important papers, and I would like for the students to have these papers as assigned reading over the weekend before my lecture. These papers are "Behavioral Aspects of Mass-Rearing of Insects," by E. Boller; and "Genetic Aspects of Insect Production," by M. MacKauer. The papers are enclosed.

Sincerely,

R. C. Bushland
Research Leader

Enclosures

cc: E. A. Taylor
L. E. LaChance

Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

April 17, 1973

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Sincerely,

R. C. Bushland
Research Leader

Enclosures

cc: E. A. Taylor
L. E. LaChance

Dr. Bushland
Mission, Texas

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL ~~AND PLANT~~ HEALTH INSPECTION SERVICE
VETERINARY SERVICES
FEDERAL CENTER BUILDING
HYATTSVILLE, MARYLAND 20782

14 MAY 1973

Mr. Taylor:
For your information
RCB

May 9, 1973

Subject: Trip Report - May 3-8, 1973

To: J. L. Hourrigan
Senior Staff Veterinarian
Sheep, Goat, Equine, and Ectoparasites

May 3, 1973

Dr. Bushland and I were in transit to Ciudad Victoria and spent the night there.

May 4, 1973

We checked the trap line, which consists of 10 fly traps located in the vicinity of Victoria and Soto la Marina, with Dr. Calvin Jones, ARS Entomologist, and Mr. Frank Gonzalez, ARS employee. Attached is a map showing the traps. We visited eight of the ~~ea~~ westernmost traps on the trap line, and all of these traps were located in very good or excellent locations. Dr. Jones gave much of the credit for the well-located fly traps to Mr. Ashley Taylor, who personally knew of all the landowners on whose land the traps were placed. We then went to Bill Nelson's La Loma Ranch near Soto la Marina. We checked 20 recently castrated calves, 10 of which were castrated 2 weeks previously and 10 were castrated on May 2. The 10 calves which were castrated first were free of screwworm infestations. Of the 10 calves castrated on May 2, we found one calf infested with first instar larvae. The other nine, which also had wounds highly attractive to screwworm flies, were free of infestations.

We met Sr. Emilio Perez, a Mexican Livestock Inspector who took us to the La Trece Ranch near Soto la Marina. We visited with the Administrator, Don Cristobal Hernandez and Paul Nett, resident Agronomist, who was trained in Switzerland. Mr. Hernandez stated that he was well-satisfied with the screwworm program and that he and his cowboys have found many empty fly release boxes in their pastures. He said that among the 3,000 head of cattle on the ranch no screwworm cases had occurred this year. They have four dipping vats and are dipping cattle with Asuntol somewhere on the ranch every day. Sr. Hernandez made a special effort to praise the working relationship that he has with Mr. Ashley Taylor, Animal Livestock Inspector, who is based in Ciudad Victoria. He repeatedly praised Mr. Taylor's work. We did not get to visit Mr. Taylor personally.

May 5, 1973

We discussed the dipping program at La Trece Ranch with Mr. Paul Nett, and he seemed willing to charge one of their dipping vats with Supona and to conduct a ranch-type field trial. He said that he could either buy the Supona or accept it from the Shell Company as a Shell contribution to a field trial. I believe that the La Trece Ranch would be a good place to carry out a field trial with the new soluble Supona. Mr. Paul Nett is a Swiss agronomist with considerable training and experience in tropical ranching. He spent 2 years in Tanzania.

We returned to the La Loma Ranch, where we reinspected the calves which were inspected the previous day. We collected one egg mass from one of the group of calves which were castrated most recently. Upon checking this egg mass on May 6, no hatch was observed and the mass was classified as "sterile." On each of the 10 castrated animals which we checked on May 4 and 5, we observed two to three plant-reared flies on each wound, and we saw only one possible native screwworm fly.

May 7, 1973

We called on Mr. Bill Nelson in his office in the Pan American Motel in Ciudad Victoria. Mr. Nelson, who has been ranching in Mexico for 16 years, stated that he operated four ranches in Mexico and that he used to employ from seven to nine cowboys on each ranch. However, because of the success of the screwworm program, he was able to operate each of the four ranches with only two cowboys on each ranch. He, too, was highly complimentary of Mr. Taylor's work. We returned to Mission.

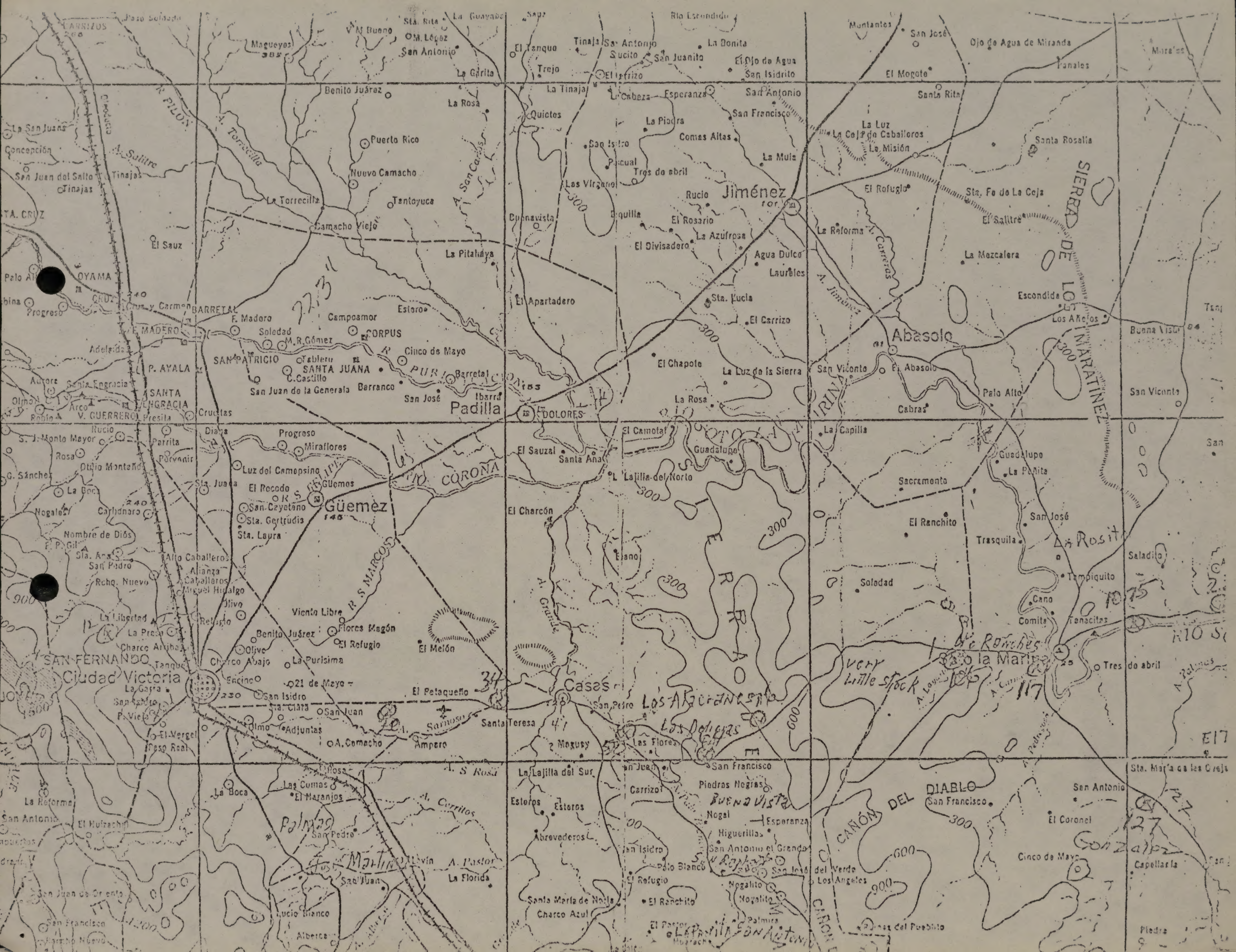
May 8, 1973

We reported the findings of the trip to Dr. Meadows, and I informed him that in my opinion the field evidence observed on the trip tended to show that program efforts were having a beneficial effect in preventing a big buildup in the grid fly release area of Northeastern Mexico. As of this writing, the Mexican grid release area has been reduced and the southern limits of the grid have been moved northward to near San Fernando, about 90 miles south of the United States-Mexico border. Dr. Gartman and I believe that some flies should continue to be released in the Soto la Marina area.

D. L. Williams
Chief Staff Veterinarian
Screwworm Eradication

Enclosure

cc:
Dr. N. L. Meyer, APHIS, Hyattsville - w/c map
Dr. R. C. Bushland, ARS, Mission, Texas - w/c map
Dr. J. L. Wilbur, APHIS, Hyattsville - w/c map
Dr. M. E. Meadows, APHIS, Mission, Texas - w/c map


Carrizos
Paso Soliseño
Magueyes
Sta. Rita
La Guayaba
N. Bueno
M. López
San Antonio
La Garita
El Tanque
Trejo
Tinaja
San Antonio
Sucito
San Juanito
El Carrizo
La Bonita
El Ojo de Agua
San Isidrito
Río Escondido
Montantes
San José
Ojo de Agua de Miranda
Panales
El Mogote
Santa Rita
R. PILÓN
Benito Juárez
La Rosa
La Tinaja
La Cabeza
Esperanza
San Antonio
San Francisco
Quiotes
La Piedra
Comas Altas
La Luz
La Ceja de Caballeros
La Misión
Santa Rosalía
La San Juana
Concepción
A. Salitre
San Juan del Salto
Tinajas
A. Torrecilla
Puerto Rico
Nuevo Camacho
A. San Carlos
San Isidro
Pascual
Tres de abril
Las Virgenes
La Mula
Rucio
Jiménez
El Refugio
Sta. Fe de La Ceja
El Salitre
SIERRA DE LOS MARATINEZ
STA. CRUZ
La Torrecilla
Tantoyuca
Camacho Viejo
Buenavista
300
Orquilla
El Rosario
La Azufrosa
El Divisadero
Agua Dulce
Laureles
La Reforma
A. Carreras
La Mezcalera
El Sauz
La Pitahaya
Palo Alto
OYAMA
CRUZ
Cruz y Carmen
BARRETAL
El Apartadero
Sta. Lucía
El Carrizo
A. Jiménez
Escondida
Los Añejos
Buena Vista
Progreso
F. Madero
Campoamor
Estero
E. MADERO
Soledad
M. R. Gómez
CORPUS
Abasolo
Adelaida
SAN PATRICIO
Tablero
Cinco de Mayo
El Chapote
La Luz de la Sierra
San Vicente
El Abasolo
P. AYALA
SANTA JUANA
R. PURIFICACIÓN
Barretal
C. Castillo
San Juan de la Generala
Barranco
San José
Ibarra
Padilla
DOLORES
Aurora
Santa Engracia
SANTA ENGRACIA
Arco
Olmo
Robla
V. GUERRERO
Presita
Cruces
La Rosa
Cabras
Palo Alto
San Vicente
Rucio
S. J. Monte Mayor
Rosa
Otilio Montaño
G. Sánchez
Diana
Parrita
Porvenir
Progreso
Miraflores
Luz del Campesino
El Camotal
Guadalupe
El Sauzal
Santa Ana
La Capilla
Guadalupe
La Puntita
Sacramento
La Boca
Nogales
Cardonaro
Sta. Juana
El Rocedo
Güemes
R. S. FELIPE
R. CORONA
Lajilla del Norte
300
San Cayetano
Sta. Gertrudis
Sta. Laura
Güemez
El Charcón
El Ranchito
San José
Trasquila
La Rosita
Saladito
Nombre de Dios
F. P. Gil
Sta. Ana
San Pedro
Rchq. Nuevo
Alto Caballeros
Alianza Caballeros
Miguel Hidalgo
R. S. MARCOS
A. Grande
Llano
SIERRA
Soledad
Tampiquito
Cano
Comita
Tenacitas
RÍO SOTO LA MARINA
900
La Libertad
La Presa
Charco Arriba
Refugio
Olivo
Viento Libre
Flores Magón
Benito Juárez
El Refugio
El Melón
SAN FERNANDO
Tanque
Ciudad Victoria
Charco Abajo
Olivo
La Purísima
Encino
21 de Mayo
La Garza
San Isidro
Sta. Clara
San Juan
El Petaqueño
Casas
San Pedro
Los Algarrobos
Soto la Marina
Tres de abril
El Vergel
P. Viejo
Olmo
Adjuntas
A. Samoso
Santa Teresa
Maguey
Las Flores
Las Delicias
A. Comacho
Ampero
San Francisco
very little stock
Paso Real
Rosa
A. S. Rosa
La Lajilla del Sur
San Juan
Carrizo
Piedras Negras
CAÑÓN DEL DIABLO
San Francisco
San Antonio
Sta. María de las Ovejas
La Boca
Las Comas
El Naranjos
A. Cerritos
Esteros
Esteros
Buena Vista
Nogal
Esperanza
300
El Coronel
La Reforma
San Antonio
El Huizachal
Palmas
San Pedro
Abrevaderos
San Isidro
Higuerillas
San Antonio el Grande
600
Cinco de Mayo
González
Capellanía
San Martín
Lavín
A. Pastor
La Florida
San Juan
Palo Blanco
El Refugio
San José
del Verde
Los Ángeles
900
San Juan de Oriente
Santa María de Noria
Charco Azul
El Ranchito
Nogalito
Nogalito
Lucio Blanco
San Francisco
Rancho Nuevo
Alberca
El Pastor
Palmira
Huizache
Pozas del Pueblito
Piedra
117
127
34
47
52
75
140
145
153
230
240

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

May 18, 1973

Subject: Screwworm Research--Soto La Marina Area

To: E. A. Taylor, Area Director
Subtropical Texas Area
Weslaco, Texas 78596

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R. C. Bushland

R. C. Bushland
Research Leader

cc: In duplicate--for your forwarding to Dr. Cox
Dr. Villasenor
Dr. Meadows
Dr. Graham
Dr. Henderson
Dr. Klassen
Dr. Knipling

EGG STERILITY RECORDS -- SOTO LA MARINA AREA 1973

Week Ending	Egg Masses Collected From Castrated Calves at Cooperating Ranches	
	Fertile	Sterile
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April 7	0	0
14	2	2
21	5	1
28	0	1
May 5	8	6
10	2	0
TOTAL	17	15

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

ROUTING SLIP

MAIL CODE	NAME		
		Action	
		Approval	
	Ed Taylor	Call Me	
		Concurrence	
	ARS	File	
		Information	
	Weslaco Tx	Investigate and Advise	
		Note and Forward	
		Note and Return	
		Per Request	
	Copy has been sent	Per Telephone Conversation	
	to Bushland + Hightower.	Recommendation	
		See Me	
		Signature	
		Circulate and Destroy	

attached is copy of presentation prepared for Joint Commission of the Screw Worm Eradication Program. This prepared at request of Dr Villa señor, director, Joint Commission. We will be ready to set in the field immediately after this presentation the first week in July. In the meantime, we are processing space data.

Charlie

RECEIVED

JUN 12 1972

AREA OFFICE
WESLACO, TEXAS

NAME	TEL. NO. (or code) & EXT.
CHARLES M. BARNES, MANAGER HEALTH APPLICATIONS OFFICE DD121 NASA-MSC HOUSTON, TEXAS 77058	
CODE *(or other designation)*	DATE

NASA FORM 26 APR 69 PREVIOUS EDITIONS MAY BE USED GPO : 1969 OF—348-365

Mr Ed Taylor
ARS
Weslaco

DRAFT

COMISION MEXICO-AMERICANA PARA LA ERRADICACION DEL GUSANO BARRENADOR
Tres Picos #79
Mexico, D.F.

Gentlemen:

Attached is a brief proposal by the NASA of the United States concerning a research program of remote sensing technology designed to assist the Joint Commission in determining the location of the screwworm fly. As currently planned, the program would be conducted as a joint effort between ARS (US Department of Agriculture) INIA, (Secretaría de Agricultura y Ganadería), CONEE and NASA and would begin immediately. If successful, results of this research could point the way to considerable cost savings in the screwworm eradication campaign.

This proposal has been presented on June 5-6, 1973 at meetings attended by the principals and convened by CONACYT. All attendees agreed that this proposal has considerable scientific merit although the final outcome cannot be precisely predicted. It was determined that this same information should be presented to the Commissioners at its meeting scheduled for ~~25-26 June~~ 2-4 July. Thus NASA has proposed the attached data for your consideration. An oral presentation is also ready if you desire. The concurrence of the Commission in the pursuit of this research is requested, its assistance in conducting

appropriate phases of the program is desired.

To effectively accomplish the remote sensing research in Mexico will require the active participation of CONEE since they have the technical expertise in this field. Also there exists an agreement between CONEE and NASA for joint participation in projects of mutual interest.

NASA
OR SCI.ATTACHE

cc: CONACYT
Dr. Enrique Martin del Campo
Director del Centro de Cooperación Internacional
Piso 12, Insurgentes Sur 1677

DRAFT

ABSTRACT

This document contains a proposal for a feasibility test using remote sensing technology to define the habitat of the screwworm fly in Mexico. Remote sensing, in this case, is the gathering of information from aircraft and spacecraft using known photographic and electromagnetic principles. If successful this technique could provide detailed environmental data over large geographic areas which could predict the presence or absence of the screwworm fly in endemic areas and thus provide a more cost effective method for determining areas for sterile fly release.

To determine the feasibility of such a system for use in the Mexican screwworm eradication campaign it is proposed that a test site in southern Mexico be developed and operated for one and one half years in the immediate future. Data from aircraft and spacecraft will be compared with information gathered from teams operating on the ground. If adequate correlations exist in the selected test areas it will be suggested that such technology be used in the major screwworm eradication campaign.

The Joint Commission costs for this program will be minimal. The U.S. agencies involved have budgeted funds for conducting the proposed research.

However, the Commission is requested to actively support the requirements for such work so that adequate monies are available from the parent agencies.

TITLE: A PROPOSAL FOR A FEASIBILITY TEST OF THE USE OF REMOTE SENSING IN SCREWWORM ERADICATION

BACKGROUND;

Use of Remote Sensing

a. General

During the past few years a program has been underway to develop earth survey techniques utilizing remote sensing from aircraft and from spacecraft. Resources which have been studied in this manner include definition of geologically important areas, coastal and estuarine areas, soils and soil moisture, crops, timber, land use, watersheds, sea state, transportation networks, etc.

b. What is Remote Sensing?

Remote sensing may be thought of as the gathering of information without actual contact with the object or area being investigated. The earth observations instrumentation which gather such information take advantage of the physical principle that all materials radiate or reflect electromagnetic energy and the radiant spectrum is unique for each material

making it identifiable. Spectral regions which have received primary attention for earth resources work include the ultraviolet, visible, infrared, and microwave. Advanced photographic techniques are emphasized in the visible range; radiometers, spectrometers, and multispectral scanners in the ultraviolet, infrared; passive radiometers, scatterometers and side-looking imaging radars in the microwave region. Data accumulated from these sources indeed give the scientific investigator "new eyes" in observing man's environment. While these new methods are in their infancy when used in application to earth's problems, they are proving cost beneficial in several instances.

c. Remote Sensing in Application to Insects

During recent months considerable effort has gone into a new program of the use of remote sensing to define environmental conditions which contribute to the degradation of human and animal health. A major subject of study has been that of insects and arthropods important to man's well being. This has included one project to study the ecology of the screwworm fly as a model

for all pupating insects. From this preliminary survey it is believed that remote sensing can contribute materially toward understanding environmental conditions where this insect thrives. However, it is also evident that insufficient scientific information is available concerning the total environmental requirements for this particular insect. While some data is available in the literature such as optimum soil temperature desired by the pupal stage, a comprehensive ecological model must be further developed. For this reason it is believed that remote sensing and appropriate ground studies in a small test area is mandatory prior to suggesting the initiation of remote sensing operations in support of the major eradication effort.

Climatology and the Screwworm Fly

a. Background

The proposal to eradicate the screwworm fly from Northern Mexico is an ambitious project. However, in the United States, it has been shown that vast areas can be liberated from this insect pest. In the U.S. eradication campaigns considerable gain was acquired by taking advantage of weather and climatological conditions which limited and defined more precisely the affected zone. For example, in the first Florida campaign an unusually

severe winter killed numerous insects and suggested that the program be initiated some months previous to planned sterile insect releases.

In Mexico, weather conditions should be considerably different. Instead of temperatures increasing in the spring latitudinally from south to north as in the southern United States, it is affected primarily by changes in altitude. The terrain varies from the tropical lowlands to a central plateau and extends to numerous high mountain peaks. Several major canyons and river valleys complicate the climatology as their waters flow from the central highlands to the coast.

Another factor which influences the insect life cycle concerns the predominance of rainy and dry seasons in much of Mexico. The eradication campaign planners will undoubtedly take advantage of these seasonal ground moisture conditions which may preclude or enhance the development of insect pupae. The problem is how does one determine appropriate climatological conditions precisely and in time to be of value to the eradication campaign.

When working in the United States, planners received data from numerous weather stations available from the Weather Service. In addition, there were reports of soil moisture and other factors relating to crop production

routinely reported to USDA. Within Mexico, the number of active weather stations is materially reduced and climatological data reported from other sources is minimal. Another major problem concerns the lack of communication systems between the reporting weather stations.

It seems logical to assume that additional detailed climatological data throughout Mexico is not only desirable but necessary to improve the cost effectiveness of the eradication program. Since it appears unlikely that sufficient detailed field reports will be available for planning purposes it will be necessary to either increase the number of observation points, improve the communications network, or to use some other method of gaining climatologic information. Remote sensing technology from spacecraft might logically provide this data in a convenient and timely format for operational use.

NASA Proposal

a. Test Site

It is proposed that remote sensing technology be utilized to determine local climatology in a test site within Mexico. The test site will have terrain with varied altitude and environmental conditions which are conducive to the

growth and study of the screwworm fly. It will be situated south of the current screwworm barrier drop zone to preclude the effects of sterile fly release on the naturally occurring population. An area near Cordoba, Veracruz has been tentatively selected for this purpose.

It is proposed that remote sensing aircraft overfly the test site to assist in the detailed ground studies on the test insect including vegetative cover and detailed geography. Collection of remotely sensed data from weather satellites would also be undertaken at appropriate intervals to compare with data returned from the entomological and/or climatological ground truth team. This data will consist of ground temperature measurements as inferred by the very high resolution radiometers aboard the space vehicle and general moisture conditions as inferred by several space measurements. Final analysis of test site results will determine the feasibility of the use of such a system in the major screwworm eradication campaign.

It is proposed that the test site also be the subject of investigation by means of the Earth Resources Technology Satellite (ERTS). It is anticipated that ERTS data will provide a fair amount of climatological information useful in the overall evaluation. Since the screwworm fly is a vigorous

insect ranging over several miles in the course of his lifetime it is possible that ERTS material may be of sufficient resolution that aircraft data will not be required or its use may be materially curtailed.

b. Remote Sensing Instrumentation

The basic question to be answered if remote sensors are to be used is what are the highly reliable parameters that can be observed which relate to the environment of the screwworm. From previous experience, the factors that strongly influence the screwworm fly population are soil moisture, temperature, and vegetative cover. These items may be influenced by latitude and, in Mexico, variations may be affected primarily by altitude.

The basic types of remote sensing instruments to be used for measuring and recording the soil moisture, temperature, and vegetative cover are summarized in the attachments.

c. General Working Arrangements

(1) A U.S. inter-agency working group will be continued to complete technical details of the proposed joint effort to determine the feasibility of the use of remote sensing to assist in eradication of the screwworm fly.

(2) A general plan for organization is attached.

(3) The Office of International Affairs, Headquarters NASA has coordinated with the U.S. Departments of Agriculture and State to lay the necessary ground work for a cooperative international program between Mexico and the U.S. as described previously. It is proposed that the current arrangements of the joint Mexican-American Commission for the Control of the Screwworm Fly be expanded to include provisions for remote sensing as an adjunct effort. It is highly desirable that appropriately trained CONEE and INIA staffs participate in total technical management of the remote sensing program. This might include entomology experts as well as remote sensing staff.

(4) Upon completion of general agreements between the two countries there will be formed a Mexican-American Coordination Group to promote harmony in the day to day operations of the program, to favorably publicize the results of goals achieved in the joint effort, and to contribute toward further programs between the two nations as appropriate.

(5) The day to day operational management of the remote sensing portion of the Phase I test site program is conceived primarily as a function to

be hosted by the Health Applications Office, (Health Services Division, Life Sciences Directorate, L.B. Johnson Space Center, NASA) located in Houston, Texas.

This Office is colocated within the Earth Observations Division, (Science and Applications Directorate) at the same center. From this position, life science related functional programs are conducted and supported by the entire staff including aircraft and data processing facilities. Appropriate staff members of the U.S. and Mexican governments are invited to participate in routine management of field operations and analysis as members of the Remote Sensing Operations Team. In this way the necessary interface can be maintained between cognizant agencies. If resident, on site participation cannot be arranged, regular meetings must be held to coordinate the various aspects of the program.

(6) NASA proposes to furnish jointly with the CONEE through contractor support arrangement, some technical and scientific staff to complement the research effort within the test site . Specifically it proposes to provide the expertise required to accumulate "ground truth" information necessary to understand data gathered by aircraft or spacecraft. Operation of the test

site would be the responsibility of the ARS - INIA team with technical assistance by NASA and CONEE. Further details on organization, personnel, and support will be resolved in meetings of the interagency task force.

d. Costs

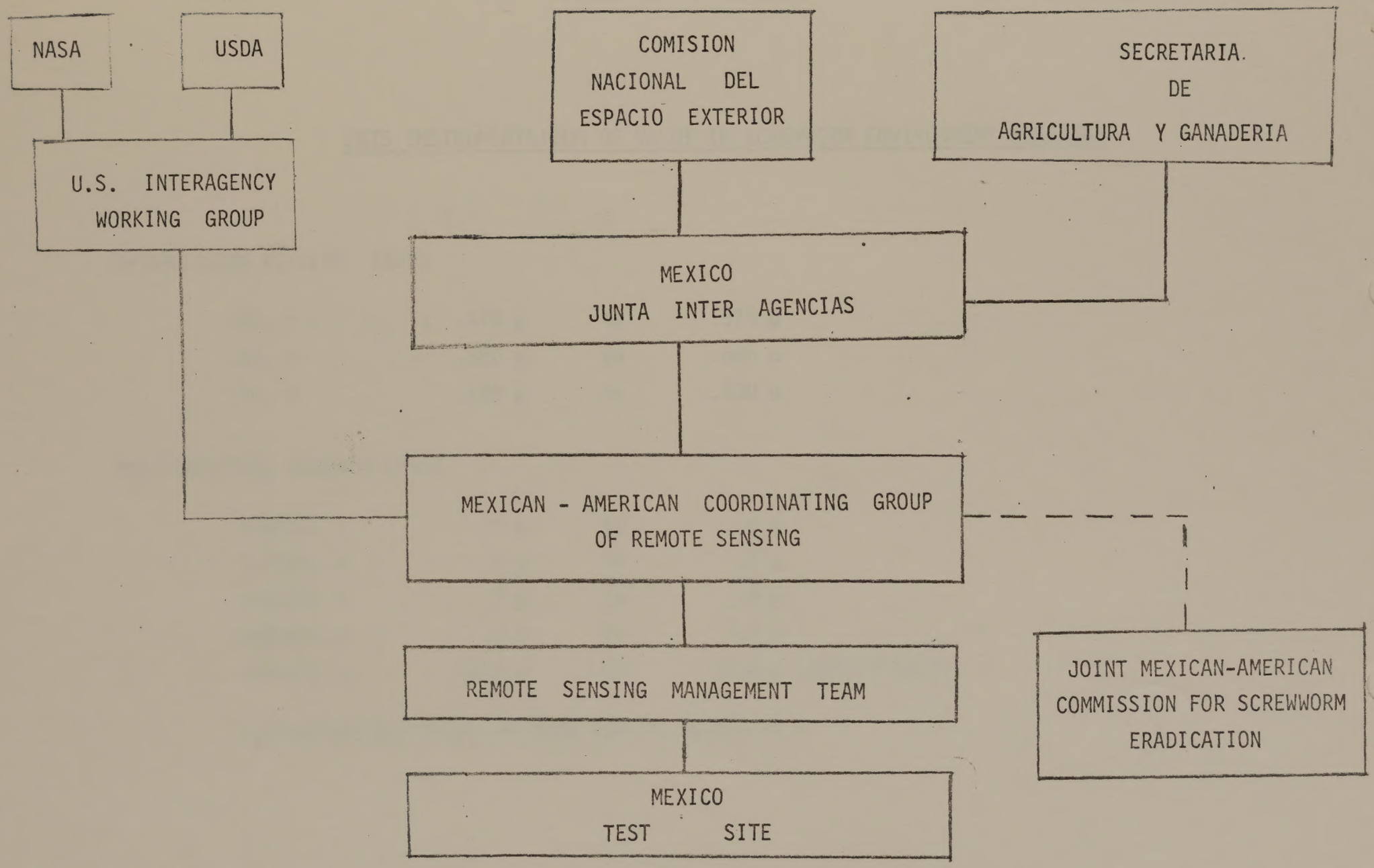
(1) It is proposed that the costs of the feasibility tests be the joint responsibility of the affected agencies of both governments with no exchange of funds. NASA (JSC) has already budgeted for technical assistance to ground truth support for the test site and for data processing and analysis of satellite and aircraft data.

(2) It is proposed that if U.S. aircraft and/or spacecraft are used, costs supporting the feasibility test operations be borne by NASA as well as data reduction and processing costs. CONEE would bear the costs of collection if the Mexican aircraft is used.

(3) The Mexican government should be asked to provide staff support and travel funds for those members assigned to work at the Houston project office. NASA can supply necessary work space and office supplies to support routine work requirements.

(4) Unanticipated costs are expected to be shared on a 50 - 50 basis or approved by participating agencies of the governments concerned.

(5) USDA is encouraged to detail sufficient technical staff to NASA (JSC) Houston to support routine operations of the Remote Sensing Operations Team and the test site within Mexico. Office space and routine support can be arranged within the Health Applications Office. Direct costs to the Joint Commission for this proposed program of research is nil. The NASA has budgeted sufficient funds for conducting its share of the program. the A.R.S. has also allocated funds to provide scientists and technicians for much of the ecological ground studies in the test site. The Commission is urged to request support by the Secretaría de Agricultura y Ganadería for the matching research effort by CONEE.


NASA
USDA
U.S. INTERAGENCY WORKING GROUP
COMISION NACIONAL DEL ESPACIO EXTERIOR
SECRETARIA DE AGRICULTURA Y GANADERIA
MEXICO JUNTA INTER AGENCIAS
MEXICAN - AMERICAN COORDINATING GROUP OF REMOTE SENSING
REMOTE SENSING MANAGEMENT TEAM
MEXICO TEST SITE
JOINT MEXICAN-AMERICAN COMMISSION FOR SCREWWORM ERADICATION

ERTS INSTRUMENTATION OF VALUE IN SCREWWORM ENVIRONMENT RESEARCH

RETURN BEAM VIDICON (RBV)

NO. 1	.475 μ	to	.575 μ
NO. 2	.580 μ	to	.680 μ
NO. 3	.690 μ	to	.830 μ

MULTISPECTRAL SCANNER (MSS)

CHANNEL 1	.5 μ	to	.6 μ
CHANNEL 2	.6 μ	to	.7 μ
CHANNEL 3	.7 μ	to	.8 μ
CHANNEL 4	.8 μ	to	1.1 μ
CHANNEL 5	10.4 μ	to	12.6 μ (ERTS B ONLY)

(INSTANTANEOUS FIELD OF VIEW 260 FT. X 260 FT.)

AIRCRAFT INSTRUMENTATION OF VALUE IN SCREWWORM RESEARCH

REMOTE SENSOR SYSTEM	MEASUREMENT/DISCIPLINE
PHOTOGRAPHIC	
COLOR PHOTOGRAPHY	BASE MAPPING
COLOR IR PHOTOGRAPHY	VEGETATION • SOIL MOISTURE • SOIL TYPE (POROSITY)
BLACK AND WHITE STERERO PHOTOGRAPHY	TOPOGRAPHY (FINE)
MULTI-SPECTRAL PHOTOGRAPHY	VEGETATION
INFRARED	
IR THERMAL SCANNER	TEMPERATURE GRADIENTS • SOIL MOISTURE • SOIL TYPE (POROSITY)
PRECISION RADIATION THERMOMETER	TEMPERATURE
MICROWAVE	
RADAR	TOPOGRAPHY (ROUGH)
RADAR ALTIMETER	ALTITUDE
PASSIVE MICROWAVE	SOIL MOISTURE

MUCH INFORMATION IS INFERRED FROM THE DIRECT MEASUREMENT. FOR EXAMPLE, KNOWING THE TYPE VEGETATION PRESENT, THE SOIL TYPE IS KNOWN FROM THE REQUIREMENTS TO SUPPORT SUCH PLANTS, THE SOIL MOISTURE IS PARTIALLY INFERRED BY ASSESSING PLANT HEALTH OR STRESS.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

May 18, 1973

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R. C. Bushland

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Research Leader

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Dr. Knipling

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AGRICULTURAL RESEARCH SERVICE
Screwworm Research Laboratory
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Screwworm Research
Box 986, Mission, Texas 78572
16 July, 1973

Dr. M.A. Villasenor
Director, Joint Commission on Screwworm Eradication
Liebnitz 20, 12 Piso
Apt. Postal M-2890
Mexico 1, D.F.

Dear Dr. Villasenor:

In accordance with your request, enclosed is the first progress report on the Cooperative Agreement between the Instituto Technologico Y de Estudios Superiores de Monterrey and the U.S. Department of Agriculture.

Ing. Miguel Melis is now in Cd. Obregon, Sonora attempting to collect screwworm egg masses and pupae for the initiation of a strain of flies to be used for releases in Mexico. He has been told to coordinate his activities with your area inspectors and to keep them fully informed about his contacts with local ranchers.

Inspector Balderas is now in Rodeo, Durango attempting to collect egg masses and/or pupae for mass-rearing. It is expected that he will remain in that area for another 2 or 3 weeks. We have received about 6 egg masses from Inspector Balderas, but very few larvae survived the trip.

We are continuing to maintain a line of screwworm traps from Victoria to La Pesca, Tamaulipas. The catches of screwworm flies have been minimal since sterile flies are no longer being released in that area.

No cooperative work is in progress with INIA at Campo Cotaxtla. After meeting with you last week, I discussed with Dr. Sifuentes the possibility of assigning an entomologist to the task of collecting egg masses and/or larvae from the Rio Balsas Basin, the Rio Lerma Basin, the Istmus of Tehuantepec, and the Southwest Coast between Matzatlan and Puerto Escondido. This work will be done under our existing agreement. I will send you a copy of the work-plan as soon as it is approved by INIA-USDA.

We expect to meet with Dr. Barnes from NASA on 19 July, at Mission. I presume that he will inform us of the status of his negotiations with the Joint Commission and with CONEE at that time.

Sacramento Mountains
Box 995, Ruidoso, Texas 79372
16 July, 1973

Dr. R.A. Williamson
Director, Joint Consulting on Sacramento Prediction
Alvadita 20, 12 Plg
Apt. Postal m-2390
Mexico 1, D.F.

Dear Dr. Williamson:

In accordance with your request, enclosed is the first progress report on the Cooperative Agreement between the Instituto Mexicano de Estudios Universitarios de Monterrey and the U.S. Department of Agriculture.

Ing. Miguel Mills is now in Mt. Oregon, Oregon, soon attending to collect some cloud seed masses and begin for the initiation of a strain of flies to be used for release in Mexico. He has been told to coordinate his activities with your area inspectors and to keep them fully informed about his contacts with local residents.

Inspector Valdivia is now in Dallas, Texas attending to collect egg masses and/or pupae for mass-rearing. It is expected that he will remain in that area for another 2 or 3 weeks. We have received about 6 egg masses from Inspector Salinas, but very few larvae survive the trip.

We are consulting to maintain a line of screwworm strain from Florida to Los Mexos, Tamaulipas. The colonies of screwworm flies have been maintained since sterile flies are no longer being released in that area.

Our cooperative work is in progress with IICA at Cerro Catedral. After meeting with you last week, I discussed with Dr. Alfonsos the possibility of carrying on experiments in the lack of colonization egg masses and/or larvae from the Rio Pecos Basin, the Rio Grande Basin, the Valley of Tamaulipas, and the Southwest Coast between Matamoros and Puerto Tampico. This work will be done under our existing agreement. I will send you a copy of the work-plan as soon as it is approved by IICA-USDA.

<u>In accord to meet with Dr. Barnes from ARS on 19 July, at Mission.</u>
I present that we will inform on of the status of his magnetizations with the Joint Consulting and with OCSCS at that time.

If I can provide you with any additional information about our cooperative activities, please let me know.

I regret that I cannot yet write presentable letters and reports in Spanish. Since Dr. Sifuentes and I read each others language much better than we can write it, I correspond with him in English and he responds in Spanish. Until my command of Spanish improves, you may prefer this system.

Sincerely,

B. G. Hightower

B.G. Hightower
Screwworm Research
Box 986
Mission, Texas 78572

cc: R. C. Bushland
E. A. Taylor

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
VETERINARY SERVICES
FEDERAL CENTER BUILDING
HYATTSVILLE, MARYLAND 20782

Dr. Werring
Mexico City,
Mexico

July 19, 1973

Subject: Draft of Program for ARS Production of Breeding Stocks to be Supplied Daily to APHIS

To: Norvan L. Meyer, Co-Director
Joint Mexico-United States Commission
for the Eradication of Screwworms
Liebnitz #20, Piso 12
Mexico City 5 D.F., Mexico

Enclosed is a draft of a proposal to Dr. Taylor on this subject prepared by Dr. Bushland. This plan will be put into effect at Mission by ARS if ARS can secure funds to finance this work. Both Dr. Meadows and the Screwworm Staff concur with this proposal for Mission.

Dr. Bushland requests that ARS be allotted sufficient space in the plant at Chiapa de Corso to house these three subcolonies. Will sufficient space be available?

J. L. Hourrigan
Senior Staff Veterinarian
Sheep, Goat, Equine, and Ectoparasites

Enclosure

cc:
Dr. D. Werring, APHIS, Mexico City, Mexico - w/c draft
Dr. M. E. Meadows, APHIS-VS, Mission, Texas - w/c draft
Mr. C. Husman, Kerrville, Texas - w/c draft

a proposal to E. A. Taylor July 17, 1973

Program for ARS production of breeding stocks to be supplied daily to APHIS

1. Have 3 genetically distinct breeding stocks (Strain) each developed from 20 or more field collected egg masses.
2. To maintain genetic purity of strains each (designated A, B and C) reared separately as shown on building sketch.
3. For breeding stocks to produce 200 million flies weekly APHIS now eggs 2 million
We will give APHIS 1 million eggs per day — 333,000 each of strains, A, B & C.
APHIS will rear these eggs to adult and stock rearing cages with equal mixture of A, B & C pupae 10,000-12,000 of each strain.
At random mating eggs from these cages will be 1/9 pure A, 1/9 pure B, 1/9 pure C and 2/3 will be AB, AC or BC with hybrid vigor
4. To produce ARS eggs we will start stocks each day for strain A (similarly for B & C) 15,000 pupae in standard colony cage
Egg when 8 days old,
7,000 ♀♀ should survive, if only half oviposit, 3500 @ 200 eggs each lay 700,000 eggs. — (Quota is 333,000)
If this margin of safety is inadequate we can increase cage stocks to as high as 35,000 flies,

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

FILE: SECTION Research
SUBJECT Screwworm
FOLDER Mexico Res.

September 12, 1973

Subject: Dr. Hourrigan's Letter of July 19 to Dr. Meyer

To: E. A. Taylor, Area Director
USDA, ARS, Subtropical Texas Area
Weslaco, Texas 78596

Only yesterday Mr. Corristan of APHIS Methods Development showed me the subject letter which he copied on a recent visit to Mexico City. He brought the matter up in connection with a discussion of plans for improved screwworm breeding stocks. He referred to my informal memorandum to you dated July 12. I am attaching a copy of the first page of that memo to identify the document sent with Dr. Hourrigan's letter, copy enclosed.

When I sent that document to you, I gave a copy to Dr. Meadows acknowledging that Mr. Graham of his staff had helped me in planning the subcolony rooms and that Mr. Smithey of his staff had made construction cost estimates. I also suggested that he might forward a copy to Dr. Williams for referral to Dr. Meyer since I thought such a subcolony facility would be needed by APHIS in the Mexico plant.

I was disturbed by the second paragraph of Dr. Hourrigan's letter which stated that I requested the allotment of that space to ARS in Mexico. This was a misunderstanding because I have never proposed that ARS establish a research unit at Chiapa de Corso. I think that we should concentrate our laboratory research here at Mission and only do field studies in Mexico.

RC Bushland
R. C. Bushland
Research Leader

Enclosures

cc: Dr. Henderson
Dr. Meadows

RECEIVED
SEP 13 1973
AREA OFFICE
WESLACO, TEXAS

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

September 12, 1973

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DSDA, ARS, Subtropical Texas Area
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R. C. Bushland
Research Leader

Enclosures

cc: Dr. Henderson
Dr. Meadows

FILE: SECTION Research
SUBJECT Screwworm
FOLDER Bacul

Screwworm file

Bushland

27 SEP 1973

Tentative Schedule for Supona 8 lb/gal SS Evaluation at Cd. Victoria, Tamps.

October 9 - OHG and Don Hopkins depart Kerrville.

October 10 - OHG depart Nuevo Laredo carrying Boophilus larvae.
Hopkins depart Mission carrying screwworm eggs.

October 11 - Wound and infest 50 yearlings with screwworms on right shoulder.
Ear tag and dye mark each animal.

October 12 - Wound and infest 50 yearlings in right flank.
Measure 2 empty vats and fill with measured quantity of clean water.

October 13 - Wound and infest 50 yearlings in left flank.

October 14 - Wound and infest 50 yearlings on left shoulder.

October 15 - Charge one vat with 0.05% Supona and dip 20 calves in this vat.
Check each wound and estimate number of ticks on escutcheon prior to dipping.
Charge second vat with 0.125% Asuntol and dip another 20 calves.
Check 10 control calves and kill screwworm larvae with benzol.

October 16 - Check all wounds for screwworm mortality.
Count ticks on escutcheon and take sample of 100 ticks from other parts of body.
Kill any living screwworms with benzol.

October 17 - Count ticks on escutcheon and take sample of 100 or more from all parts of body.

October 19 - Challenge all wounds by implanting newly hatched screwworms.
Place 1 g of B. microplus larvae on backline of 10 calves -- 4 from each treatment group and 2 controls.

October 20 - Check wounds for screwworm survival.
Do not molest living larvae except on control calves which can be killed with benzol.

October 21 - Check all wounds that contained living larvae on previous day.
If larvae are still alive, kill with benzol.

October 22 - Challenge as on 19th, but use a second group of 10 yearlings for the tick challenge.
Do not reinfest any calf with screwworms if screwworms survived in this calf for 2 days during previous challenge.

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If larvae are still alive, kill with benzol.

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Do not reinfest any calf with screwworms if screwworms survived in this calf for 2 days during previous challenge.

October 23 - Check as on the 20th.

October 24 - Check as on the 21st.

October 25, 26, 27 - Repeat of above procedure.

October 29, 30, 31 - Repeat of above procedure.

November 1, 2, 3 - Repeat of above procedure.

Thereafter, make tick counts on the groups of 10 calves on 14th day after that group was infested with tick larvae; i.e., Nov. 2, Nov. 5, Nov. 8, Nov. 12, and Nov. 15. Scratch entire calf and count all ticks on each calf.

Need young screwworm eggs from Mission on following dates:

October 10 (Hopkins will carry)
11
12
13
18
21
24
28
31

October 23 - Check as on the 20th.

October 24 - Check as on the 21st.

October 25, 26, 27 - Repeat of above procedure.

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October 10 (Hopkins will carry)
11
12
13
18
21
24
28
31

COMISION MEXICO-AMERICANA PARA LA ERRADICACION DEL GUSANO BARRENADOR DEL GANADO.

A las 10:00 hrs. del 24 de octubre de 1973, se inició la Tercera Reunión de la Comisión México-Americana para la Erradicación del Gusano Barrenador del Ganado, con la asistencia de los siguientes miembros de la Comisión:

Representando a México, los doctores Héctor Campos López, Director General de Sanidad Animal; Pablo Zierold Reyes, ex-Director de la Facultad de Medicina Veterinaria y Zootecnia de la Universidad Nacional Autónoma de México; Lic. Ernesto Jaquez M. en representación del Lic. Francisco Ramos Cantoral; y Dr. Marco Antonio Villaseñor, Director de la Comisión.

Representando a los Estados Unidos de América, los doctores Clayton G. Yeutter, Subsecretario de Agricultura; Francis J. Mulhern, Administrador del Servicio de Inspección de Sanidad Animal y Vegetal; Ernest E. Saulmon, Administrador Adjunto del Servicio de Inspección de Sanidad Animal y Vegetal; Robert S. Sharman, ex-funcionario del Servicio de Inspección de Sanidad Animal y Vegetal; y Norvan L. Meyer, Co-Director de la Comisión.

También estuvieron presentes, pero sin voz ni voto, el siguiente personal de la Comisión: Dr. Daniel F. Werring, Asistente del Co-Director; Sr. John Ellingson, Jefe Administrativo, Sección Americana; Sr. Ignacio Siller Gil, Jefe Administrativo Sección Mexicana; Sr. Rafael Uribe, Asistente del Jefe Administrativo, Sección Mexicana; Dr. Floyd E. Smith, Jefe de Operaciones de Campo, Sección Americana; Dr. Leopoldo Medina, Jefe de Operaciones de Campo, Sección Mexicana;

MEXICAN-AMERICAN COMMISSION FOR THE ERADICATION OF SCREWWORM.

At 10;00 A.M. on October 24, 1973, the Third Meeting of the Mexican-American Commission for the Eradication of Screwworm came to order, with the following members of the Commission in attendance:

Representing Mexico, Drs. Héctor Campos López, Director General of Animal Health, Pablo Zierold Reyes, School of Veterinary Medicine of the National University of Mexico, retired; Lic. Ernesto Jaquez M., representing Lic. Francisco Ramos Cantoral and Dr. Marco Antonio Villaseñor, Director of the Commission.

Representing the United States of America, Dr. Clayton G. Yeutter, Assistant Secretary of Agriculture; Dr. Francis J. Mulhern, Administrator of the Animal and Plant Health Inspection Service; Dr. Ernest E. Saulmon, Deputy Administrator of the Animal and Plant Health Inspection Service; Dr. Robert S. Sharman, Animal and Plant Health Inspection Service, retired; and Dr. Norvan L. Meyer, Co-Director of the Commission.

Also present, but holding no voice nor vote, were the following Commission personnel: Dr. Daniel F. Werring, Assistant Co-Director; Mr. John G. Ellingson, Administrative Officer, American Section, Mr. Ignacio Siller Gil, Administrative Officer, Mexican Section; Mr. Rafael Uribe, Assistant Administrative Officer, Mexican Section; Dr. Floyd E. Smith, Technical Co-Director, Field, American Section; Dr. Leopoldo Medina, Technical Co-Director, Field, Mexican Section; Mr. Henri Charpentier, Engineer Supervisor, Plant, American Section; Ing. Manuel Garcia, Engineer Supervisor, Plant.

Ing. Henri Charpentier, Ingeniero Supervisor de la Planta, Sección Americana, Ing. Manuel García, Ingeniero Supervisor de la Planta, Sección Mexicana; y Sr. Samuel Luna, Oficial de Información, Comisión Mixta.

Mexican Section; and Mr. Samuel Luna, Information Officer, Joint Commission.

Las siguientes personas fueron invitadas para asistir a la Tercera Reunión de la Comisión: Sr. Chester Husman, Ingeniero Asesor, APHIS; Sr. Richard Ellwood, Ingeniero Asesor, APHIS; Dr. Donald Williams, Jefe de Personal, APHIS, Washington, D. C.; Dr. M. E. Meadows, Veterinario Encargado de la Planta de Producción de Moscas en Mission, Texas; Srita. Kathleen Ellis, Oficial de Información, APHIS; Sr. Kenneth Goodrich, Oficial de Información, APHIS; Srita. Virginia Jacome, Abogado, Secretaría de Agricultura y Ganadería, Mexico; Arq. Luis E. Seade, Director General, Dirección General de Proyectos y Construcciones de la SAG; y Sr. Frank Meyers, Especialista en Programación, APHIS.

Also invited to attend the Third Commission Meeting were the following persons: Mr. Chester Husman, Consulting Engineer, APHIS; Mr. Richard Ellwood, Consulting Engineer, APHIS; Dr. Donald Williams, Chief Staff Veterinarian, Screwworm Eradication, APHIS; Dr. M. E. Meadows, Veterinarian in Charge, Fly Production Plant, Mission, Texas; Miss Kathleen Ellis, Information Officer, APHIS; Mr. Ken Goodrich, Information Officer, APHIS; Miss Virginia Jacome, Lawyer, Mexican Secretariat of Agriculture; Arq. Luis E. Seade, Director General, General Direction of Projects and Constructions, Mexican Secretariat of Agriculture; and Mr. Frank Meyers, Program Specialist, APHIS.

El Dr. Campos López presentó las disculpas del Dr. Gustavo Reta Pettersson, por no poder asistir a la reunión debido a su ausencia de la Ciudad de México.

Dr. Campos Lopez transmitted the regrets of Dr. Gustavo Reta Pettersson, Assistant Secretary of Livestock, for not being able to be present at this meeting due to his absence from Mexico City.

Estando ausente el Subsecretario de Ganadería del país anfitrión, el Dr. Campos López pidió al Dr. Villaseñor que presidiera la junta.

In the absence of the Assistant Secretary of the host country, Dr. Campos Lopez requested that Dr. Villaseñor preside over the meeting.

Se procedió a la lectura y aprobación de la Agenda, como sigue:

The Agenda was read and approved, as follows:

I. Aprobacion de Minutas de la última junta.

II. Actividades del Programa desde la última junta.

a) Logros del Programa
b) Infestación en el Norte de México

I. Approval of Minutes of last meeting.

II. Program activities since last meeting.

a) Program Accomplishments.
b) screwworm infestation, Northern Mexico.

III. Reglamentos de la Comisión

a) Discusión General
b) Contrato de Trabajo

IV. Financiamiento de la Comisión.

a) Reporte del Estado de Cuenta.
b) Presupuesto
c) Gastos de viaje de los miembros de la Comisión.

V. Enmiendas en el Acuerdo Internacional.

a) Cambios sobre la construcción de la planta, y sitio de construcción.
b) Clarificación de la forma de pago de los beneficios laborales de los empleados de la Comisión.

VI. Percepción Remota como ayuda a la erradicación del gusano barrenador.

VII. Discusión General.

VIII. Firma de acuerdos.

IX. Decisión sobre la fecha y lugar de la próxima reunión.

La Sección Mexicana de la Comisión propuso los siguientes temas, para su discusión durante la junta.

a) Integración del Programa Norte a la Comisión.

b) Concentración de todas las actividades relacionadas con el gusano barrenador a la Comisión.

En el punto número I de la Agenda, se leyeron y aprobaron las minutas de la última reunión.

En el punto número II, el Dr. Villaseñor leyó un resumen de las actividades llevadas al cabo desde la última reunión. Discutió los progresos hechos en la pla-

III. Commission Regulations.

a) General Discussion
b) Employee Contract

IV. Commission Finances

a) Status Report
b) Revised Budget
c) Commissioners' travel expenses

V. Change in International Agreement

a) Construction site.
b) Clarification of payment of benefits of Joint Commission employees.

VI. Remote Sensing, as an aid to screwworm eradication

VII. Discussion.

VIII. Signing of Agreements.

IX. Date and place of next meeting.

The Mexican Section of the Commission proposed the following additional topics, for discussion at the meeting.

a) Integration of the northern screwworm program into the Commission.

b) Concentration of all activities related to screwworm in the Commission.

Under topic No. I the minutes of last meeting were approved.

Under item No. II of the Agenda, Dr. Villaseñor read a resume of program activities carried out since the last meeting. He discussed planning and

neación y construcción de la planta de producción. El Dr. Villaseñor mencionó la excelente cooperación que el Gobernador de Chiapas está prestando a la Comisión en relación con la construcción de la planta productora de moscas. El terreno para la construcción de la planta será cedido a la Secretaría de Agricultura y Ganadería, quien a su vez lo proporcionará a la Comisión para llevar al cabo dicha construcción.

construction progress regarding the production plant. He said that the Governor of Chiapas was giving the Commission excellent cooperation. The Mexican Secretariat of Agriculture will be granted a piece of land near Tuxtla Gutierrez and will make same available to the Commission for the construction of the sterile fly production facility.

Surgió una discusión con respecto al precio y las especificaciones de la caseta de guardia que deberá ser construida en el sitio de la planta. Estuvieron presentes, para dar detalles sobre la construcción de dicha caseta, representantes del Comité de Arquitectura e Ingeniería. El Arq. Luis E. Seade de México, el Ing. Richard Ellwood, Sr. Chester Husman de Estados Unidos, el Ing. Manuel García y el Ing. Henri Charperntier, así como el Arq. Raúl López Rodríguez tomaron parte en la discusión. Los Directores recibieron instrucciones en el sentido de que se deberían tomar las máximas precauciones al gastar los fondos de la Comisión para asegurarse de que el diseño y la construcción de la planta sean razonables y apropiados.

A discussion was held regarding the price and specifications of the guardhouse at the entrance to the production plant site. Representatives of the Architecture and Engineering Committee as well as representatives of the Company which is designing the plant explained the details of the proposed construction of the guardhouse. Architect Luis Seade, representing the Mexican Secretariat of Agriculture, Mr. Richard Ellwood, Mr. Chester Husman representing the United States, Ing. Manuel Garcia and Ing. Henri Charpentier, as well as Architect Raul Lopez Rodriguez, representing the design company participated. The Directors were directed to use utmost caution in expending Commission funds to assure that design and construction are reasonable and proper.

El Dr. Floyd E. Smith discutió la situación del gusano barrenador en el norte de México y aclaró algunas dudas que surgieron con respecto a este tema.

Dr. Floyd E. Smith discussed the screwworm situation in northern Mexico and answered questions regarding this point.

En el punto número III de la Agenda, se leyeron y discutieron los reglamentos de la Comisión. Los miembros de la Comisión recomendaron una revisión de los mismos para presentarlos de nuevo en la próxima reunión.

Under item number III of the Agenda, the proposed Commission regulations were read and discussed. The Commission members recommended revisions and asked that they be presented at the next meeting.

Se revisó el contrato de trabajo y se llegó a la conclusión de que los Directores debían revisarlo con la ayuda del Departamento Legal de la Secretaría de Agricultura y Ganadería de modo que se llenaran todos los requisitos legales y de la Comisión.

A proposed employee contract was discussed. The Commissioners said that development of an acceptable contract should be the responsibility of the Directors. The contract will be reviewed with the legal department of the Mexican Secretariat of Agriculture and an acceptable contract will be developed.

En el punto número IV de la Agenda se presentó un Estado Financiero de la Comisión.

Under item No. IV of the Agenda, the Financial Status Report was presented.

Se presentó y aprobó el presupuesto revisado de la Comisión.

A revised Budget of the Commission was presented and approved.

Se aprobó y firmó un Memorandum de Convenio con respecto al pago de gastos de viaje de los Comisionados. Dichos gastos deberán ser cubiertos por la Comisión.

A Memorandum of Understanding regarding payment of Commissioners' travel expenses by the Commission, was approved.

Los Comisionados encomendaron a los Directores la elaboración de un documento para las dependencias de Gobierno que tienen a su cargo el pago de fondos para financiamiento del programa, de manera que se cubran las contribuciones en el tiempo fijado para ello.

The Commissioners ordered the Directors to develop a system with the Mexican Government to assure acceptable timing of contributions.

En el número V de la Agenda se discutió una Enmienda al Acuerdo Internacional para el cambio de una planta en barcos por una planta en tierra. Se propuso un intercambio de notas entre los Secretarios de Agricultura de México y Estados Unidos por medio de las cuales se efectúe dicho cambio.

Under item No. V of the Agenda, proposed Amendment to the International Agreement, changing from a ship-based plant to a land-based plant was discussed. It was decided to explore the possibility of effecting the amendment by an exchange of letters between the Mexican and United States Secretaries of Agriculture.

Los Comisionados pidieron a los Directores y a la Srita. Virginia Jácome, representante del Departamento Legal de la Secretaría de Agricultura y Ganadería que elaboraran una proposición para el pago de prestaciones a los empleados de la Comisión. Este punto será discutido en la próxima reunión.

The Commissioners asked the Directors and the representative of the Legal Department of the Mexican Secretariat of Agriculture to clarify and develop a proposal for the payment of benefits for Joint Commission employees. This topic will again be discussed at the next Commission meeting.

A las 7:30 P.M. se dió por terminada la primera sesión correspondiente al día 24 de octubre.

The first session of the meeting ended at 7:30 P.M. on october 24, 1973.

A las 10:00 hrs. del día 25 de octubre se inició la segunda sesión de la Tercera Reunión de la Comisión.

The second session of the meeting started at 10:00 A.M. on october 25, 1973.

En el punto número VI de la Agenda, el Dr. Charles Barnes de la NASA explicó la manera en que la Percepción Remota podría ayudar a la erradicación del Gusano Barrenador. Este proyecto sería llevado al cabo por la NASA de Estados Unidos y la Comisión Nacional

Under topic No. VI on the Agenda, Dr. Charles Barnes from NASA, explained possible use of Remote Sensing in the eradication of screwworms. He explained that it is a project to be carried out by NASA on the part of the United States and the National Commission of Outer

del Espacio Exterior de México. Los Comisionados aprobaron este proyecto y pidieron a los Directores que consultaran con las agencias relacionadas con dicho proyecto para lograr una mejor coordinación del mismo.

Space of Mexico. The Commissioners approved the project and asked the Directors to consult with the related agencies for the purpose of coordination.

En el punto número VI de la Agenda, se presentaron dos proposiciones de la Sección Mexicana.

Under item No. VI, two propositions of the Mexican Section were presented.

La proposición número uno fue con respecto a las investigaciones de gusano barrenador hechas por empresas privadas y oficiales. Se propuso que todas estas pruebas e investigaciones sean coordinadas por la Comisión y que se obtenga autorización de la misma antes de llevarlas al cabo. También se dijo que la Dirección General de Sanidad Animal, de la Secretaría de Agricultura y Ganadería, tiene toda la responsabilidad con respecto a estas actividades y que deberá ser consultada si se llegaran a presentar problemas de jurisdicción.

Proposition number one was in regard to investigations by private or official agencies concerning screwworm. It was proposed and agreed that all such tests and investigations be coordinated by the Commission, and that clearance be obtained prior to the initiation of such activities. It was also pointed out that Animal Health of the Mexican Secretariat of Agriculture has overall responsibility and should be consulted if jurisdictional problems arise.

La proposición número dos fue en relación con la integración a la Comisión de todas las actividades de erradicación del programa norte. Se acordó que la necesidad de dicha integración, el tiempo de la misma y los métodos para llevarla al cabo deberían ser dicutidos por los Directores y el Dr. Meadows, y que una proposición conjunta debería ser presentada en fecha próxima a los miembros de la Comisión.

Proposition number two called for the integration of the northern screwworm eradication program into the Commission. It was agreed that the need for integration, timing of integration and methods for accomplishing it should be discussed between the Directors and Dr. Meadows, and that a joint proposal should be presented to the Commission for action at a later date.

Al final de la junta, los Comisionados firmaron Memoranda de Convenio y otros documentos que fueron presentados para su aprobación.

At the close of the meeting, the Commissioners signed Memorandums of Understanding that had been approved and other documents presented for consideration.

Se decidió que la próxima reunión se llevará al cabo en la ciudad de Washington, D. C. El Dr. Clayton Yeutter invitó cordialmente a todos los Directivos de la Comisión a asistir a dicha reunión.

It was decided that the next Commission meeting would take place in the city of Washington, D. C., in February 1973. Dr. Clayton Yeutter cordially invited Commission officials to attend.

Se levantó la reunión a las 14:00 hrs. del día 25 de octubre de 1973.

The meeting was brought to a close at 2:00 P.M. on October 25, 1973.

Todo el proceso de la junta se grabó en cintas que fueron puestas en el archivo de la Comisión en la Ciudad de México.

México, D. F., a 25 de octubre de 1973.

SECCION MEXICANA

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Fecha

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Fecha

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Fecha

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Fecha

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Fecha

The proceedings of the meeting were recorded and tapes are on file in the Commission offices in Mexico City.

Mexico City, Mexico, October 25, 1973

AMERICAN SECTION

_____ _____
Date

_____ _____
Date

_____ _____
Date

_____ _____
Date

_____ _____
Date

COMISION MEXICO-AMERICANA PARA LA ERRADICACION DEL GUSANO BARRENADOR

LA ENERGIA ATOMICA AL SERVICIO DEL GANADERO

LEIBNITZ No. 20 - 12o. PISO
MEXICO 5, D. F.

DIRECTOR:
DR. MARCO ANTONIO VILLASEÑOR
TEL. 531-65-95

CO-DIRECTOR:
DR. NORVAN L. MEYER
TEL. 531-85-69

CONCENTRACION DE TODAS LAS ACTIVIDADES RELACIONADAS CON EL GUSANO BARRENADOR DEL GANADO QUE SE ESTAN EFECTUANDO EN TERRITORIO MEXICANO, EN LA COMISION MEXICO - AMERICANA PARA LA ERRADICACION DEL GUSANO BARRENADOR.

Al establecerse la Comisión México-Americana para la Erradicación del Gusano Barrenador, y en base al Acuerdo del 28 de Agosto de 1972, se formó un organismo internacional con una gran fuerza y versatilidad, constituído con todas las bases legales para afrontar cualquier evento en el desarrollo de sus actividades.

Sin embargo, durante los trabajos que se efectúan en forma rutinaria nos encontramos con que algunas actividades que son de competencia directa de la Comisión, son desarrolladas por otras dependencias mexicanas que han celebrado convenios con el Departamento de Agricultura de los Estados Unidos de América.

Se ha encontrado, por ejemplo, que existe personal mexicano viajando por diversas entidades del país recolectando moscas (Cochliomyia Hominivorax, Coquerel) para diversos fines, por supuesto en apoyo de las investigaciones entomológicas de la planta en Mission, Texas.

INCORPORATION OF ALL SCREWWORM RELATED ACTIVITIES IN MEXICAN TERRITORY TO THE MEXICAN AMERICAN COMMISSION FOR THE ERADICATION OF SCREWWORM

A versatile and legally strong organization capable of facing any event in its activity development was formed with the establishment of the Mexican American Commission for the Eradication of Screwworm, Agreement of August 28, 1972.

Nevertheless, we keep finding in our routine work that some activities in the Commission field are being effected by other Mexican agencies having agreements with the United States Department of Agriculture.

For example, we have found out that Mexican personnel is collecting flies (Cochliomyia Hominivorax, Coquerel) for various ends from some country entities, needless to say, supporting the Mission Plant entomological investigations.

'mam

Oct. 25, 1973

Es conocido por todos nosotros que el Tecnológico de Monterrey y el INIA (Instituto Nacional de Investigaciones Agrícolas), tienen firmados acuerdos cooperativos con el Departamento de Agricultura de Estados Unidos, que incluyen entre las cláusulas de trabajo, actividades claramente definidas como investigaciones específicas sobre el gusano barrenador del ganado. Estos acuerdos o su refrendo fueron firmados después del 28 de agosto de 1972, según los informes que tenemos.

Well known by all of us is the fact that Monterrey's Technologic and the INIA (National Institute for Agricultural Investigations) have signed cooperation agreements with the United States Department of Agriculture, including among the work clauses activities, clearly defined as specific investigations on screwworm. According to the information we have, these agreements or their endorsement were signed after August 28, 1972.

Pués bien, durante el desarrollo del programa en el norte, se les ha dado todo género de facilidades a los grupos de investigadores, precisamente por que se carecía de fondos y consecuentemente de personal calificado; pero con el establecimiento de la Comisión queda también establecida la sección para el desarrollo de métodos o investigaciones. No vemos razón alguna para que las investigaciones en México sobre el gusano barrenador del ganado, se hagan fuera del control de la Comisión, ya que desorganizan y duplican los esfuerzos.

During the northern program's evolution and because of fund unavailability and thus lack of skilled personnel, all facilities were given to the investigation groups, but with the establishment of the Commission was also established a section for investigation and method development. We do not see any reason for having screwworm investigation in Mexico made outside Commission control since this disorganizes and duplicates the efforts.

La integración de estas investigaciones a la Comisión, se justificaría con el inciso (h) del punto 7 del Acuerdo del 28 de agosto de 1972, que señala como actividades de la Comisión: "Realización de otras actividades apropiadas relacionadas con la erradicación y la prevención del gusano barrenador del ganado en la República Mexicana".

Integration of these investigations to the Commission would be justified with paragraph (h) Point 7 of the August 28, 1972 Agreement defining as Commission activities: "Fulfilling other screwworm eradication and prevention applicable activities in the Mexican Republic".

Por lo anteriormente expuesto, nos permitimos solicitar concretamente:

Que se hagan los arreglos necesarios para incorporar a la Comisión todas las actividades relacionadas con el gusano barrenador.

Based on the aforementioned, we precisely request:

That pertinent arrangements be made to incorporate all screwworm related activities to the Commission.

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LEIBNITZ No. 20 - 12o. PISO
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DIRECTOR:
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TEL. 531-65-98

CO-DIRECTOR:
DR. NORVAN L. MEYER
TEL. 531-65-69

MEMORANDUM DE CONVENIO

Por medio del presente se acuerda que los Directores investiguen a la brevedad posible, los trámites necesarios para modificar los acuerdos que existen entre el Departamento de Agricultura de los Estados Unidos de América y el Tecnológico de Monterrey, el Instituto Nacional de Investigaciones agrícolas y otras dependencias, en caso de que haya más acuerdos que incluyan entre sus puntos al gusano barrenador del ganado.

Los Directores deberán sugerir la forma legal de lograr la modificación únicamente en lo referente a las actividades relacionadas con el gusano barrenador del ganado.

Los Directores deberán elaborar una lista de procedimientos y dependencias que deberán ejecutarlos, con objeto de que la modificación se haga:

a) Lo más rápido posible.
b) Por medio de las dependencias autorizadas.
c) Sin interferir en los otros puntos de los acuerdos.

Los Directores elaborarán un presupuesto detallado del incremento que representa en los gastos de la Comisión la integración de las actividades descritas anteriormente.

MEMORANDUM OF UNDERSTANDING

It is hereby agreed that the Directors shall investigate as soon as possible the procedure to follow for modification of the Agreements between the United States of America Department of Agriculture and the Monterrey - Technologic, the National Institute for Agricultural Investigations and other agencies, in the event that further - Agreements including screwworm among their topics shall come up.

Directors shall suggest the legal procedure to follow in obtaining this modification which shall be only as to that referring to screwworm related - activities.

Directors shall prepare a list of procedures and of the Agencies which - shall execute those so that the modification shall be effected:

a) As soon as possible
b) Through official agencies
c) Without interfering with other topics in the Agreements.

Directors shall prepare a detailed - budget of the cost increase that the aforementioned activities shall represent to the Commission.

'mam

Oct. 25, 1973

Los Directores no tramitarán directamente con las dependencias correspondientes, a menos que reciban instrucciones específicas, y por medio de documentos sugerirán a los comisionados los procedimientos internacionales que deben seguirse.

Directors shall suggest to the Commissioners the international procedure to follow and no direct transactions with official agencies shall be made by them unless specific instructions in this regard are given.

SECCION MEXICANA		AMERICAN SECTION	
_____	Fecha	_____	Date
_____	Fecha	_____	Date
_____	Fecha	_____	Date
_____	Fecha	_____	Date

México D. F. a 25 de octubre de 1973

Mexico City, Mexico October 25, 1973

☆ U.S. GOVERNMENT PRINTING OFFICE: 1972—487-451

D4367

U.S. DEPARTMENT OF AGRICULTURE

SPEED-MEMO

PART NUMBER	DATE
1	30 Oct 1973

TO

Mr. E. A. Taylor

FROM

B. R. Hightower

SUBJECT

Report on Repeat Insecticide Tests Being Conducted by O. H. Graham

MESSAGE *(WRITE CONCISE MESSAGE. SIGN AND FORWARD PARTS 1 AND 2 TO ADDRESSEE. RETAIN PART 3)*

Enclosed is a report prepared by O. H. Graham on the insecticide testing. I presume that this report was requested by your office. Dr. Graham requested limited distribution and/or "confidential" classification of this report.

RECEIVED
OCT 31 1973
AREA OFFICE
WESLACO, TEXAS

SIGNATURE

B. R. Hightower

REPLY *(USE THIS SPACE FOR REPLY. SIGN AND DATE. RETURN PART 2 TO SENDER. RETAIN PART 1)*

SIGNATURE

DATE

Mr. Taylor
Weslaco, Texas

October 29, 1973

Subject: Accidental Insecticide Kill of Cattle, Victoria, Mexico

To: The Record

Dr. R. C. Bushland called at 8 a.m. on October 26 and provided additional information on the above subject, first reported by telephone the previous day. He said that a report from Dr. Hugh Graham late on October 25 revealed that 40 head of cattle, not 45, were killed. All are Angus, one of which was a cow and the others were calves. A Mexican veterinarian spent the day and night on-site and feels the remainder of the herd will recover from ill-effects of the treatment.

We had asked Dr. Jack Palmer, ARS/SR veterinarian at Kerrville, to go to Mexico to assist in any way possible. Dr. Bushland said that by the time that arrangements were made to charter a plane to Victoria (time precluded commercial travel) the report from Dr. Graham was received. Therefore, Dr. Palmer did not go but remains on stand-by.

Dr. Bushland informed me that he received a call Thursday from Dr. Norvan Meyer who is an APHIS employee and co-chairman of the Mexico-U.S. Joint Commission on Screwworm Eradication. (This is being written from memory so titles and spelling may not be completely correct.) Dr. Meyer said that Mr. Villasenor, the Mexican co-chairman, was upset that the experiment was being conducted without concurrence of the Joint Commission. Dr. Meyer demanded a report of the Victoria operation but Dr. Bushland told him that he was in no position to provide such a report since he had no first-hand knowledge of what happened. Dr. Meyer then told Dr. Bushland to have Dr. Graham write a report to the Joint Commission. Dr. Bushland asked me what he should do.

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I told him to have Dr. Graham write a report of the occurrence but to send the report to him. Dr. Buchland will send the

report to Mr. E. A. Taylor, AD, for transmittal to this office. We in turn will send to OA for his information in working with APHIS. I told Dr. Bushland that, unless officially notified to the contrary, we are to continue to work with our Mexican counterparts through the Department of State; i.e., the U.S. Embassy and the Agricultural Attaché.

The above information, in a bit more detail, was relayed to Dr. R. J. McCracken at 9:30 a.m. Dr. McCracken concurred in the advice that I gave Dr. Bushland and said it is consistent with the working agreement recently signed by ARS and APHIS. He wanted to know if we have any guidelines on what our relationship to the Joint Commission should be. I told him that I am not aware of any. We agreed on the need to have details on duties and responsibilities of the Joint Commission.

Even if the Joint Commission has some responsibility for all screwworm work in Mexico research as well as control operations, the Victoria occurrence is complicated by the fact that the experiment was designed to evaluate tick control compounds as well as screwworm disinsectization.

At 10:30 a.m., Dr. Bushland called again following additional conversations with Graham and Meyer. The final count is actually 41 calves, valued at $8,200, and 7 cows, valued at $2,240. All are purebred Angus. Shell has agreed to assume full financial responsibility.

Meyer said that the Joint Commission met Thursday and that Dr. F. J. Mulhern and Dr. Clayton Yeutter and their Mexican counterparts were present. Obviously, this was a previously scheduled meeting. During the meeting, Mr. Villasenor made a formal complaint about the dipping incident. He said that the Mexican representative from Shell Chemical Company as well as the U.S. representative, Mr. Bill Miller, visited his office several months ago and verbally outlined the tests that were subsequently initiated. He said that the purpose was noble and asked that they give him a formal, written proposal. He heard no more about the plan until he heard with amazement that ARS was conducting the tests. He said that he was embarrassed that he, the top screwworm man in the Mexican Government, did not know what was going on.

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Apparently, Dr. Mulhern apologized for ARS, said he would contact Mr. Edminster upon his return to Washington (he left Mexico Thursday evening), and felt sure that coordination procedures could be established. Dr. Yeutter stated essentially the same.

Dr. Bushland was clearly irritated at what he felt to be an APHIS attempt to place all blame on ARS. In response to my question, he said that we always keep APHIS/Mexico informed on our livestock research in Mexico. Indeed, we rely on them to make arrangements for the research that we conduct on-site in Mexico. He cited as an example the fact that APHIS had obtained the permit from Mexico that allowed us to take a screwworm fly colony into Mexico and set up the colony in the Cattleman's Association Office there.

Apparently, Dr. Meyer was quite angry when Dr. Bushland told him that the report he wanted would be provided through channels. He said that he would not wait several weeks for such a report to be forthcoming and demanded, at least, a letter to the Joint Commission. Bushland pointed out that Graham had no secretary, was writing the report long-hand, would continue over the week end, send it by courier to Mission for typing early next week and then transmittal to OA.

Dr. Bushland said that Dr. Meyer then wanted to know where Dr. Billy Hightower was. Bushland told him that Dr. Hightower was in Mexico meeting with NASA and the Mexican counterparts of NASA. He said that he would give Dr. Meyer the telephone number of the hotel where Dr. Hightower was staying if he wanted to contact him. Dr. Bushland said that Dr. Meyer said, "I'm not going to call him. You call him and tell him that if he's smart, he will get over here and let us know that he's here." Dr. Bushland said that he felt sure that Dr. Meyer knew that Dr. Hightower was there since our people usually use the APHIS offices (Mission, Texas, and Mexico) to let them know that they will be in Mexico and have them make hotel reservations.

I have a previously planned trip to Mexico scheduled for November 14-16. While the purpose is primarily to review

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our on-going research on cotton insects and citrus black fly, as well as screwworm, it appears that I should discuss ARS and APHIS activities of mutual interest in Mexico with appropriate officials while there. This thought will be pursued with Dr. McCracken and, perhaps, IPD in the event that Department of State needs to be involved.

H C Cox
Associate Deputy Administrator

cc:
R. J. McCracken, OA, Washington, D. C.
E. A. Taylor, AD, Weslaco, Texas
R. C. Bushland, Mission, Texas

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cc:
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L. A. Taylor, AD, Weslaco, Texas
R. C. Bushland, Mission, Texas

Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

October 30, 1973

Subject: Dipping Vat Trials with Compound 4072 in Tamaulipas

To: E. A. Taylor, Area Director
USDA, ARS, Subtropical Texas Area
Weslaco, Texas 78596

In accordance with verbal agreements between responsible ARS and APHIS officials, the undersigned and Mr. Donald E. Hopkins proceeded from Kerrville, Texas, to Cd. Victoria, Tamps., on October 9, 1973, for the purpose of observing and assisting with the evaluation of 2 dipping vat formulations of Compound 4072 in field trials that were intended to obtain information on the effectiveness of residuals of this insecticide against screwworms and cattle fever ticks. Earlier tests conducted in the United States had indicated that the chemical was highly effective as a killing agent when infested cattle were sprayed or dipped, but no information was available concerning the period that treated cattle would be protected from reinfestation with either pest. Two United States companies, Shell Chemical Co. and Cooper USA Inc., have proposed to register Compound 4072 for use in the U. S. (mostly in regulatory programs) to combat outbreaks of either screwworms or Boophilus ticks. Since it would not have been technically feasible to conduct field tests in the United States, a proposal for tests in Mexico was prepared by Shell Chemical Co. and Shell de Mexico and presented to the Directors of the tick and screwworm eradication programs in the Secretaria de Agricultura y Ganaderia in Mexico City and was approved by both officials.

USDA-APHIS Screwworm Inspectors stationed in northern Mexico were asked to assist the company by contacting Mexican ranchers who might be willing to furnish cattle and dipping vats. In early October, two ranches near Cd. Victoria were selected and the test was initiated on October 11. Since then one lot of 20 infested yearling calves have been dipped in each of the following insecticides: Shell Supona 8 lb/gal-SS, Cooper 4072 DFF and coumaphos (asuntol). Another 10 calves, 5 at each ranch, are being used as untreated controls.

At the present time, the treatments are being challenged at approximately 3-4 days posttreatment intervals by implanting newly hatched screwworms in each of the 4 wounds on each calf until larval survival is observed.

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At the present time, the treatments are being challenged at approximately 3-4 days posttreatment intervals by implanting newly hatched screwworms in each of the 4 wounds on each calf until larval survival is observed.

In addition, 1/5 of the calves in each treatment group are exposed to artificial infestation by Boophilus microplus at the time of each challenge. All calves are subject to natural infestation by both pests. The calves are presently being challenged for the fourth time, and not enough results have been accumulated to justify presentation at this time.

Several calves were apparently mildly poisoned by both formulations of Compound 4072 and 6 calves (3 from the test group and 3 others) dipped in Shell Supona died within 24 hours of dipping. It appeared that the formulation might be more toxic to cattle than had been expected, and Mr. Miller, the Shell Chemical Co. representative, several times expressed an interest to the APHIS Screwworm Inspector and to me in charging other vats at other ranches where large numbers of cattle are routinely dipped with a lower concentration of Shell Supona so as to obtain more extensive use experience and data on the differential take-out, if any, of his formulation. We now know that shortly after the vat near Cd. Victoria was charged on October 15 Mr. Miller turned over approximately 11 gal. of the shell formulation to the APHIS inspector for safe-keeping, but neither Mr. Hopkins nor I were aware of this transfer at the time it occurred.

On October 23, Mr. Hopkins accompanied the APHIS inspector on one of his routine trips to the field, and they spent the night at Soto la Marina, Tamps. On the morning of October 24, Mr. Hopkins was asked to help charge a vat at Rancho Rosita with Shell Supona. He was surprised as neither he nor I had been previously aware that a vat was to be charged with Shell Supona that day. (There had been prior discussion of charging a vat at El Trece with Cooper 4072 DFF on the 24th, and Mr. Hopkins was carrying written instructions prepared by me for the correct dilution of the Cooper formulation.)

The Shell Supona was in 5 gal. cans and had the regular Spanish language commercial label for 20% EC which clearly said that the total active ingredient was 20.97%. Mr. Hopkins correctly calculated that 18 liters of such a concentrate would give a concentration somewhat less than 0.04% (actually 0.03762%) and that quantity of concentrate was placed in the vat. Only after cattle began to show signs of poisoning and Mr. Hopkins had returned to Cd. Victoria were we able to deduce that the cans were incorrectly labeled. Actually, 5 gallons of Shell Supona 8lb/gal. SS had been placed in the vat, and the concentration of Supona in the dip was 0.1812%. A total of 890 cattle were dipped in the vat at Rosita before signs of poisoning were observed and the operation was stopped.

As soon as a report of the poisoning was received at Cd. Victoria, Dr. Miguel Coo Luna, a veterinarian from the state cattleman's association, went to the ranch and worked day and night for 3 days. Undoubtedly he

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saved many cattle that would have died without his care. As of October 29, a total of 48 calves and 12 cows had died, and it appeared that the death loss would not go much higher. Most of the dipped cattle were Zebu, but some Brangus and Angus were also dipped. Apparently the Angus were the most susceptible as most of the dead animals were Angus calves. Representatives of Shell Chemical Co. expressed the opinion that their company would reimburse the owner for the dead animals.

O. H. Graham
Research Entomologist

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Research Entomologist

FILE SECTION Research
SUBJECT Screwworm
FOLDER Mexico Program

SUBTROPICAL TEXAS AREA
P. O. Box 267
Weslaco, TX 78596

November 2, 1973

Subject: Dipping Vat Trails with Compound 4072 in Tamaulipas

To: H. C. Cox, Associate Deputy Administrator
Southern Region, ARS-USDA
New Orleans, LA

The attached report summarizes the conditions in which the tests with Compound 4072 were conducted and the accidental poisoning of animals in Mexico.

We believe that it would be well for you to visit with the APHIS personnel and with Dr. Villasenor, Director of the Joint U.S.-Mexico Commission on Screwworm Eradication, during your visit to Mexico this month.

It is our understanding that both APHIS in Mexico and Dr. Villasenor had given tentative approval of these tests in Mexico but they have not received a full report on the number of deaths and animals involved in the large-scale test.

Edgar A Taylor

E. A. Taylor
Area Director

Encl.

ARS:SR:EATaylor:je 11/2/73

FILE SECTION Personal
SUBJECT Franklin
FOLDER Miles Roy

SUBTROPICAL TEXAS AREA
P. O. Box 267
Weslaco, TX 78596

November 2, 1973

Subject: Dipping Vat Trails with Compound 4072
in Tamaulipas

To: H. C. Cox, Associate Deputy Administrator
Southern Region, ARS-USDA
New Orleans, LA

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E. A. Taylor
Area Director

Encl.

ARS:SR:EATaylor:je 11/2/73

Sent via telecopier 11/6/73, 11:30 am
nc

FILE: SECTION Research
SUBJECT Screwworm
FOLDER Mex. Program

SUBTROPICAL TEXAS AREA
P. O. Box 267
Weslaco, TX 78596

November 6, 1973

Subject: Itinerary for Mexico Trip

To: H. C. Cox, Associate Deputy Administrator
Southern Region, ARS-USDA
New Orleans, LA

Tues., 11/13: Reservation, Sun Valley Motel, Harlingen.

Wed., 11/14: Depart Brownsville with M. Lukefahr, 6:00 a.m.
Arrive Victoria, 11:00 a.m. (Lunch)
Inspect insecticide dipping test with O.H.Graham, 12:00 - 2:00 p.m. (Meet O. H. Graham at San Antonio Motel).
Inspect Victoria-Soto La Marina Screwworm trapping line, 2:00 - 3:00 p.m.
Continue Soto La Marina-Aldama-Tampico.
Arrive at Tampico, 6:00 p.m. (Spend night at San Antonio or Holiday Inn.)

Thur.,11/15: Inspect Distribution Center, Tampico Airport, 7:00 - 7:30 a.m.
Depart for San Rafael (Veracruz)
Arrive San Rafael, 1:00 p.m.
Inspect cotton plots and research projects at San Rafael, 1:00 - 3:00 p.m.
Depart for Poza Rica, 3:00 p.m.
Depart Poza Rica via AeroMexico, 5:25 p.m.
Arrive Mexico City, 6:30 p.m.
Reservations at Plaza Vista Hermosa.

Fri., 11/16: Meet with Drs. Meyer, Villasenor, and Werring, at Joint Commission Office at 11:00 a.m.

If you have any questions, please call us.

E. A. Taylor

E. A. Taylor
Area Director

Sent via telecopier 11/6/73, 11:30

mc

FILE: SECTION
SUBJECT
FOLDER

SUBTROPICAL TEXAS AREA
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UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
VETERINARY SERVICES
FEDERAL CENTER BUILDING
HYATTSVILLE, MARYLAND 20782

November 6, 1973

Subject: Field Tests Using Supona Against Boophilus spp. and Screwworms Conducted in Tamaulipas, Mexico

To: Donald Miller
Director
Veterinary Services

Certain members of the Joint Mexico-U.S. Screwworm Eradication Commission have recently been critical of subject work claiming that the work had not been properly approved by Mexican officials.

Actually, planning the subject field test and previous work by U.S. personnel in Mexico began many years ago, considerably before the Joint Commission was activated.

Entomologists from Entomology Research, Agricultural Research Service (ARS), largely those from their Kerrville Laboratory, have been actively working in Mexico for some 10 years testing various pesticides against Boophilus spp. ticks and/or screwworms. Their work in Mexico has been with the approval of officials of the Government of Mexico and they have enjoyed an excellent relationship with such officials and with cooperating Mexican ranchers. This work has been done at various locations in Mexico including the facility in Nuevo Laredo, Tamaulipas, Mexico.

In January 1973, Dr. Roger O. Drummond, Entomology Research, Kerrville, Texas, after being called by Mr. Bill Miller of Shell USA, was kind enough to forward us several reprints and a summary (copy enclosed) of the considerable work done by himself, Dr. Hugh Graham, and others of the Kerrville group using compound 4072 (Supona) against ticks and screwworms. They worked in Mexico with formulations provided by Shell and those provided by Cooper USA.

In March 1973, at Beltsville, Dr. R. K. Strickland dipped 4 sheep (infested with psoroptic scabies mites) and a 1-week-old lamb in 0.10 percent Supona. The result of this limited work was encouraging (report enclosed).

On April 24, 1973, Bill Miller and Dr. Robert Young of Shell USA came to our offices; and we discussed the work which would be necessary prior to considering Supona a permitted dip for ticks, screwworms, and/or scabies. Participants in the meeting included Drs. J. L. Hourrigan and D. L. Williams and Messrs. Robert Gerrish and Donald Miller. We

put Bill Miller in touch with Dr. Frank Hamilton (Austin, Texas), who indicated he would help look for a vat to use for disproportionate carryout studies. Bill Miller planned to get in touch with Dr. Hugh Graham also.

They were advised that we depended heavily upon ARS for data on efficacy of pesticides looking to Dr. Roberts' work at Albuquerque in regard to scabies research and Dr. R. C. Bushland, Dr. Hugh Graham, and others of the Kerrville group for research on ticks and screwworms.

We have worked very closely with these researchers for many years. Our eradication programs have and are benefiting greatly from the outstanding professional and personal attention they have given to our program needs.

On May 7, Mr. Miller and Dr. Young of Shell USA, and the representative of Shell Mexico, went to Dr. Marco Antonio Villasenor's office and met with him and others and discussed the proposed work testing the efficacy of Supona against ticks and screwworms. (We understand that Dr. D. F. Werring of Dr. N. L. Meyer's office participated in the meeting.)

On May 10, Shell Mexico wrote Dr. Villasenor in regard to the meeting asking him to sign and return the letter if he agreed; thus, confirming the approval of the work in Mexico. (Copy of letter enclosed.)

On May 9, Dr. Williams summarized the field trip he and Dr. Bushland had made (May 3-8) to Northern Mexico. A copy of his report was provided for Dr. Meyer. Dr. Williams indicated the willingness of officials of La Trece Ranch to cooperate in a field trial using Supona. (Copy of the report is enclosed.)

On September 27, following the screwworm meeting at Mission, Texas, Dr. Williams and I and others went over the protocol (provided by Dr. Graham) of the field trial with Dr. Bushland and approved it. After the meeting it was learned that Cooper USA wanted its formulation of Supona included in the field test. I agreed that it would be unfair to exclude them. They had provided Supona for some of the earlier work and have developed some excellent formulations of pesticides.

Dr. Graham is preparing the written report of this research work. The report is being forwarded through the required Entomology Research channels (Dr. Bushland, Mr. Ed Taylor at Weslaco, through their New Orleans office, and on to the Administrator, ARS.

Meanwhile our preliminary report is as follows:

Ranch cattle near Ciudad Victoria were dipped in coumaphos or were dipped in 0.10 percent Supona. Some were dipped in the Cooper product and some in the Shell product.

No deaths occurred in cattle dipped in the Cooper product although a few may have shown mild toxicity.

Of 800 dipped in the Shell product, five calves died, and the owner was paid by Shell for his losses.

Shell was interested in learning the disproportionate carryout properties of their formulation; and arrangements were made to dip 800 cattle at La Trece Ranch (mentioned in Dr. Williams' memorandum of May 9). The Supona used was the new 90 percent formulation; however, Shell had put it in containers having the old label which indicated it was a 20 percent formulation. This resulted in a mistake in charging the vat and following the label in this case resulted in a bath concentration considerably in excess of that desired, and caused the death of about 60 cattle. Shell has assumed the responsibility and is paying the owners in full for the losses.

Insofar as the ranchers are concerned, they are apparently satisfied; and if any problems still exist they are with Mexico City.

An additional complaint (in Mexico City) was that screwworm eggs, larvae, and flies were taken from the Mission plant into Mexico (without the proper permits) for use in the tests. We understand that a proper permit was obtained from Mexican authorities. One report indicates that some 10 wild-screwworm egg masses a day were observed on test cattle; thus, it is not believed the artificial infestations were any problem insofar as screwworm populations were concerned.

J. L. Hourrigan
Senior Staff Veterinarian
Sheep, Goat, Equine, and Ectoparasites

4 Enclosures

cc:
Dr. Norvan L. Meyer, APHIS-VS, Mexico City, Mexico
Dr. R. C. Bushland, ARS, Mission, Texas
Dr. Hugh Graham, ARS, Kerrville, Texas
Dr. J. L. Hourrigan, APHIS-VS, Hyattsville, Maryland
Dr. R. K. Strickland, APHIS-VS, Beltsville, Maryland

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
SOUTHERN REGION
U. S. Livestock Insects Laboratory
P. O. Box 232
Kerrville, Texas 78028

January 29, 1973

Subject: Effectiveness of Compound 4072 for the Control of Ticks

To: J. L. Hourrigan, Senior Staff Veterinarian
USDA, AHIS, Sheep, Goat, Equine and Ectoparasites
Federal Center Building, Hyattsville, Maryland

Recently Bill Miller called me and explained that you and he had a lengthly conversation concerning the effectiveness of Compound 4072, "Supona", for the control of ticks. He stated that you would like additional information that we have obtained on the effectiveness of this compound.

Compound 4072 is extremely effective for the control of ticks on livestock. I consider it to be one of the most highly effective compounds that I have worked with. It shows effectiveness against a variety of ticks affecting cattle and horses. For example, in the enclosed paper on tropical horse ticks (attachment 1) you will note that it ranks third in the list of compounds effective in screening tests. In attachment 2 it also ranks third. In screening tests for the control of the winter tick. In a paper soon to be published in the Journal of Economic Entomology, Compound 4072 ranks second for the control of Boophilus annulatus and B. microplus. This data is presented in attachment 3. It has also been shown to be effective against the brown dog tick in a series of "tea-bag" tests (attachment 4). Compound 4072 has been used in Mexico by us for the control of both screwworms and Boophilus ticks on cattle. As attachment 5 shows, it was highly effective against both species of ticks and screwworm larvae. Most recently we published a paper (attachment 6) on the effectiveness of a variety of compounds for the control of Boophilus. In that paper, in Table 2, you will note that Compound 4072 ranks second among 19 sprays for the control of both species. Also, in that paper, Table 3 presents results of tests we conducted with sprays of an emulsifiable formulation and a solubilized formulation of Compound 4072. You will note that both gave greater than 99% control at concentrations as low as 0.01%. Attachment 7 contains some data on a dipping vat trial in Nuevo Laredo with Compound 4072. In Table 3, we present data showing effectiveness of 4072 at concentrations as low as 0.055%. I am also presenting to you some data that has not been published but has been presented in our quarterly reports. The attached Table 1 shows the effectiveness of a diluent free formulation of Compound 4072. This formulation was supplied by Cooper U.S.A., Inc. 100% active ingredient. You will note that at 0.01% we obtained less that 99% control. Therefore, it appears to us that the diluent free formulation is not as effective as the emulsifiable or solubilized. Also attached is Table 2 which contains latest data on effectiveness of Compound 4072 in our vat at Nuevo Laredo. The formulation of Compound 4072 was one part 4072:

one part Triton X-100 (this is another solubilized formulation). You will note in the table that the vat was charged November 10, 1971 and as of October 18, 1972 it was still affording greater than 99.9% control. We have recently conducted a test in January and it still appears to be highly active. The concentration of the vat has dropped dramatically. This is because we have not replenished with additional toxicant.

I hope that these data will be of value to you. I personally feel that Compound 4072 shows great promise for the control of ticks on livestock. It has shown effectiveness throughout the world for the control of Boophilus and a number of other species of ticks.

Roger

Roger O. Drummond
Location Leader

Enclosures

Knowles has copy of this letter & attachment #1

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
Veterinary Services
Beltsville, Maryland 20705

March 29, 1973

Subject: Preliminary Tests With Supona

To: J. L. Hourrigan
Senior Staff Veterinarian
Sheep, Goat, Equine and Ectoparasites

As per your request of this past February, we dipped 4 infested sheep and one lamb in 0.10% Supona (formulation SD7859). Three of the sheep carried a chronic infestation of Psoroptes ovis; one sheep had an acute infestation of 8 weeks duration; the lamb was only one week old and had no lesions.

Three days post dipping the sheep were carefully examined for the presence of live mites. Many dead adult and nymphal stages were observed in the scrapings but no live adults and nymphs were observed. However, at least one dozen live larvae were observed. The sheep were carefully scraped at seven and 14 days post treatment and no live mites of any stage were observed.

It appears from these limited observations that the Supona is lethal to all the mites on the sheep at the time of the dipping, but is not ovacidal. Nevertheless, the larvae which subsequently hatch from the treated eggs are soon killed by the residual action of the Supona remaining on the fleece and skin. This observation was further borne out by in vitro tests conducted in the laboratory with the rabbit ear mite, Psoroptes cuniculi. The Supona dip killed almost all the adults and nymphs but larvae continued to hatch from the treated eggs. As with P. ovis, the P. cuniculi larvae died soon after hatching.

It is still too early to be assured that the one treatment has been effective. A break could occur later. The test was also conducted later in the scabies season than we prefer to test materials. It is easier to kill mites in March than in January. A larger scale test earlier in the scabies season might not look so promising. Also, questions remain to be answered concerning the stability in the dip vat and selective carryout.

You will be advised if there are further developments.

R K Strickland

R. K. Strickland, D.V.M.
Chief, Parasitology
Veterinary Services Diagnostic Laboratory

UNITED STATES DEPARTMENT OF AGRICULTURE
FARM ANIMAL AND POULTRY QUARANTINE SERVICE
Veterinary Services
Beltsville, Maryland 20705

March 29, 1971

Subject: Parasitology Tests With Sheep

To: [illegible]
Chief, Staff Veterinarian
Sheep, Goat, Equine and Ruminants

As per your request of 5th- past February, we dispatched 4 infected sheep and one lamb to [illegible] (Accession 30[illegible]). Three of the sheep carried a chronic infection of *Fasciola hepatica* with some sheep had an acute infection of 2 weeks duration; the lamb was only one week old and had no lesions.

Three days post dispatch the sheep were routinely examined for the presence of live mites. Many dead mites were observed, although no live mites were observed on the sheep. Dead mites were observed. However, at least one dozen live larvae were counted. The sheep were routinely examined as above and 14 days post treatment and no live mites or any sheep were observed.

It appears from these limited observations that the fungus is likely to kill the mites on the sheep or the mites die of the disease, but do not survive. Nevertheless, the larvae which subsequently hatch from the eggs are soon killed by the residual action of the fungus remaining on the fleece and skin. This observation was further borne out by the fact that conducted in the laboratory using the same site, [illegible]. The fungus did kill most of the eggs and the larvae hatching were unable to hatch from the remaining eggs. As with [illegible], the [illegible] lived more after hatching.

It is still too early to be sure that the treatment has been effective. A second round seems likely. The fungus was also produced later in the season than in previous [illegible]. It is likely to kill mites in the fleece longer than in January. A larger scale test earlier in the season should be tried to provide. Also, questions remain to be answered regarding the results in the dip vat and selective pastures.

You will be advised if there are further developments.

R. K. Ferguson, D.V.M.
Chief, Parasitology
Veterinary Services Diagnostic Laboratory

JLH

October 29, 1973

INFORMATION RECEIVED BY TELEPHONE ON OCTOBER 29, 1973,
FROM SHELL CHEMICAL COMPANY, SAN RAMON, CALIFORNIA

On May 10, 1973, the following letter was prepared by Shell Mexico and sent to Dr. Villasenor who signed the original of the letter as requested and returned it to Shell Mexico.

(This letter had been translated from Spanish into English)

"This letter is in reference to the visit that Mr. W. V. Miller and Dr. Young, both of Shell Chemical U.S., and I made to your Office on Monday, May 7.

The purpose of our visit was to inform you of an experimental project that the Shell Chemical Company plans to accomplish in our country on the campaign against the cattle worm as well as the national campaign against the cattle tick.

The trial in question, as we informed you verbally, is to evaluate a new supona, 8 lb. per gallon, formulation in an 0.05 percent concentration emersion bath for the purpose of fighting the problems of both the fly and the tick considering that the fight against the cattle worm campaign is in agreement that the experiment in question be accomplished.

We would appreciate your signing at the bottom of this page so that we can present this before the general administration of the national campaign against the cattle tick in order to be able to coordinate both campaigns during the supona trial.

Thank you in advance."

(sent by Shell Mexico)

(Shell indicates the original was signed by Dr. Villasenor as requested)

October 29, 1973

INFORMATION RECEIVED BY TELEPHONE on October 29, 1973,
FROM SHELL CHEMICAL COMPANY, SAN JOSE, CALIFORNIA

On May 10, 1973, the following letter was prepared by Shell Chemical and sent to Dr. Williamson who signed the original of the letter as requested and returned it to Shell Chemical.

(This letter has been translated from Spanish into English)

"This letter is in reference to the visits that Mr. R. V. Miller and Dr. Young, both of Shell Chemical U.S., had I made to your office on Monday, May 7.

The purpose of our visit was to inform you of an experimental project that the Shell Chemical Company plans to conduct in our country on the campaign against the cactus worm as well as the national campaign against the cactus itch.

The trial in question, at an informed yes weekly, is to evaluate a new suspension, 2 lb. per gallon, formulation in an 0.05 percent concentration starting back for the purpose of studying the problems of both the fly and the itch considering that the fight against the cactus worm requires in a consumer that the experiment in question be accomplished.

We would appreciate your signing at the bottom of this page so that we can present this before the general administration of the national campaign against the cactus itch in order to be able to coordinate both campaigns during the upcoming trial.

Thank you in advance."

(Letter by Shell Chemical)

(Shell indicates the original was signed by Dr. Williamson as requested)

May 9, 1973

Subject: Trip Report - May 3-8, 1973

To: J. L. Bourrigan
Senior Staff Veterinarian
Sheep, Goat, Equine, and Ectoparasites

May 3, 1973

Dr. Bushland and I were in transit to Ciudad Victoria and spent the night there.

May 4, 1973

We checked the trap line, which consists of 10 fly traps located in the vicinity of Victoria and Soto la Marina, with Dr. Calvin Jones, ARS Entomologist, and Mr. Frank Gonzalez, ARS employee. Attached is a map showing the traps. We visited eight of the easternmost traps on the trap line, and all of these traps were located in very good or excellent locations. Dr. Jones gave much of the credit for the well-located fly traps to Mr. Ashley Taylor, who personally knew of all the landowners on whose land the traps were placed. We then went to Bill Nelson's La Loma Ranch near Soto la Marina. We checked 20 recently castrated calves, 10 of which were castrated 2 weeks previously and 10 were castrated on May 2. The 10 calves which were castrated first were free of screwworm infestations. Of the 10 calves castrated on May 2, we found one calf infested with first instar larvae. The other nine, which also had wounds highly attractive to screwworm flies, were free of infestations.

We met Sr. Emilio Perez, a Mexican Livestock Inspector who took us to the La Trece Ranch near Soto la Marina. We visited with the Administrator, Don Cristobal Hernandez and Paul Nett, resident Agronomist, who was trained in Switzerland. Mr. Hernandez stated that he was well-satisfied with the screwworm program and that he and his cowboys have found many empty fly release boxes in their pastures. He said that among the 3,000 head of cattle on the ranch no screwworm cases had occurred this year. They have four dipping vats and are dipping cattle with Asuntol somewhere on the ranch every day. Sr. Hernandez made a special effort to praise the working relationship that he has with Mr. Ashley Taylor, Animal Livestock Inspector, who is based in Ciudad Victoria. He repeatedly praised Mr. Taylor's work. We did not get to visit Mr. Taylor personally.

May 5, 1973

We discussed the dipping program at La Trece Ranch with Mr. Paul Nett, and he seemed willing to charge one of their dipping vats with Supona and to conduct a ranch-type field trial. He said that he could either buy the Supona or accept it from the Shell Company as a Shell contribution to a field trial. I believe that the La Trece Ranch would be a good place to carry out a field trial with the new soluble Supona. Mr. Paul Nett is a Swiss agronomist with considerable training and experience in tropical ranching. He spent 2 years in Tanzania.

We returned to the La Loma Ranch, where we reinspected the calves which were inspected the previous day. We collected one egg mass from one of the group of calves which were castrated most recently. Upon checking this egg mass on May 6, no hatch was observed and the mass was classified as "sterile." On each of the 10 castrated animals which we checked on May 4 and 5, we observed two to three plant-reared flies on each wound, and we saw only one possible native screwworm fly.

May 7, 1973

We called on Mr. Bill Nelson in his office in the Pan American Motel in Ciudad Victoria. Mr. Nelson, who has been ranching in Mexico for 16 years, stated that he operated four ranches in Mexico and that he used to employ from seven to nine cowboys on each ranch. However, because of the success of the screwworm program, he was able to operate each of the four ranches with only two cowboys on each ranch. He, too, was highly complimentary of Mr. Taylor's work. We returned to Mission.

May 8, 1973

We reported the findings of the trip to Dr. Meadows, and I informed him that in my opinion the field evidence observed on the trip tended to show that program efforts were having a beneficial effect in preventing a big buildup in the grid fly release area of Northeastern Mexico. As of this writing, the Mexican grid release area has been reduced and the southern limits of the grid have been moved northward to near San Fernando, about 90 miles south of the United States-Mexico border. Dr. Gartman and I believe that some flies should continue to be released in the Soto la Marina area.

D. L. Williams
Chief Staff Veterinarian
Screwworm Eradication

Enclosure

cc:
Dr. H. L. Meyer, APHIS, Hyattsville - w/c map
Dr. R. C. Bushland, ARS, Mission, Texas - w/c map
Dr. Wilbur - w/c map
Dr. Meadows - w/c map

FILE: SECTION Research
SUBJECT Screwworm Program
FOLDER Mexico Research

File

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
VETERINARY SERVICES
FEDERAL CENTER BUILDING
HYATTSVILLE, MARYLAND 20782

November 6, 1973

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To: Donald Miller
Director
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Shell was interested in learning the disproportionate carryout properties of their formulation; and arrangements were made to dip 800 cattle at La Trece Ranch (mentioned in Dr. Williams' memorandum of May 9). The Supona used was the new 90 percent formulation; however, Shell had put it in containers having the old label which indicated it was a 20 percent formulation. This resulted in a mistake in charging the vat and following the label in this case resulted in a bath concentration considerably in excess of that desired, and caused the death of about 60 cattle. Shell has assumed the responsibility and is paying the owners in full for the losses.

Insofar as the ranchers are concerned, they are apparently satisfied; and if any problems still exist they are with Mexico City.

An additional complaint (in Mexico City) was that screwworm eggs, larvae, and flies were taken from the Mission plant into Mexico (without the proper permits) for use in the tests. We understand that a proper permit was obtained from Mexican authorities. One report indicates that some 10 wild-screwworm egg masses a day were observed on test cattle; thus, it is not believed the artificial infestations were any problem insofar as screwworm populations were concerned.

J. L. Hourrigan
Senior Staff Veterinarian
Sheep, Goat, Equine, and Ectoparasites

4 Enclosures

cc:
Dr. Norvan L. Meyer, APHIS-VS, Mexico City, Mexico
Dr. R. C. Bushland, ARS, Mission, Texas
Dr. Hugh Graham, ARS, Kerrville, Texas
Dr. J. L. Hourrigan, APHIS-VS, Hyattsville, Maryland
Dr. R. K. Strickland, APHIS-VS, Beltsville, Maryland

U.S. DEPARTMENT OF AGRICULTURE

REFERENCE SLIP

DATE: 11/19/73

TO: Merrill Cleveland

- [ ] ACTION
- [x] NOTE AND RETURN
- [ ] APPROVAL
- [ ] PER PHONE CALL
- [ ] AS REQUESTED
- [ ] RECOMMENDATION
- [x] FOR COMMENT
- [ ] REPLY FOR SIGNATURE OF
- [ ] FOR INFORMATION
- [ ] RETURNED
- [ ] INITIALS
- [ ] SEE ME
- [ ] NOTE AND FILE
- [ ] YOUR SIGNATURE

H.C. sent this by telecopier today after an earlier phone call to me. H.C. feels it would be desirable, even urgent, for me to sign this & send it to Dr. Campos Lopez as soon as possible. Apparently there is some feeling on the part of the Mexican officials that there has been some attempted cover-up. I plan to discuss this with Gil Wise at APHIS dist.

FROM: R. McCracken

11/19

FORM AD-514 (6-63)

Via telecopier
to E. A. Taylor
Weslaco, Texas

From M. L. Cleveland

File

Rec'd via
Telecopier
11-20-73
11:15 a.m.
J.E.

HCCox:mlw
ARS:SR

RUSH TO Mr. McIracken

Fm. H C Cox, SR

Dr. Hector Campos Lopez, Director
Sanidad Animal
Dr. Mora 15
9º Piso
Mexico City D.F., Mexico

Dear Dr. Campos Lopez:

Following his recent return from Mexico, Dr. H C Cox informed me of his discussions with you regarding Agricultural Research Service (ARS) involvement in a tick-screwworm research project in the State of Tamaulipas. I understand that Drs. Villasenor and Fernandez of your staff, Dr. Meyer of Animal and Plant Health Inspection Service (APHIS) and Dr. Hightower of ARS also participated in the meeting on November 17. It seems that certain commercial chemical companies, APHIS and ARS personnel were involved in planning as well as conducting the research.

During work on unfortunate incident of cattle death occurred,

On the basis of information provided to me, there was obviously a failure by all parties, not only in obtaining your concurrence in the proposed research, but in keeping your office fully informed. Regardless of where the fault lies, I am especially concerned that ARS personnel appear to have failed to maintain the close contact and working relationship with your staff that I understand has been characteristic of our organizations in the past. Dr. Cox tells me that Dr. Villasenor spoke with special praise regarding his past association with our scientists. He also tells me that our scientists have equally high regard for Dr. Villasenor.

Your national tick eradication program and the Mexican-American screwworm eradication program are highly important to both USA and Mexican agriculture. As the agency charged with responsibility for conducting the USDA research related to the screwworm program, we certainly hope that the unfortunate occurrence in Tamaulipas will not hinder our opportunity to work with you on this important project.

specify?

I understand that Dr. Meyer is working with members of his staff and ours in preparing a report on the above

11/19
8 am

subject. Additionally, Dr. Cox tells me that during your meeting, Dr. Fernandez suggested that any future, formal proposals for ARS livestock research in Mexico be referred to your office and that he concurred in behalf of the office of the Deputy Administrator for the Southern Region of ARS. I am pleased that your office and our Southern Region have made this arrangement. I was especially pleased to learn that you suggested that the scientists and research leaders of our respective staffs continue to work together informally in developing research plans that may be submitted for formal approval.

We deeply regret the incident in Tamaulipas but you can be sure that ARS will make every effort to prevent the occurrence of any similar incident in the future.

Sincerely,

Ralph J. McCracken
Associate Administrator

cc:
F. J. Mulhern, APHIS
E. A. Taylor, AD, Weslaco, Texas
J. R. Johnston, AD, College Station, Texas
A. W. Cooper, New Orleans, La.
N. L. Mayer, APHIS, Mexico City
R. O. Drummond, Kerrville, Texas
R. C. Bushland, Mission, Texas

Ralph 11/19
I'm writing a big regret giving Lithik and confirming our talk on this A.M.
HB

12-3-73
Sent via Telecopier to
M L Cleveland & H C Cof

12-4-73
Sent via telecopier to
L. Henderson w/copy to
W Klassen. m

COMISION MEXICO-AMERICANA PARA LA ERRADICACION DEL GUSANO BARRENADOR

LA ENERGIA ATOMICA AL SERVICIO DEL GANADERO

LEIBNITZ No. 20 - 12o. PISO
MEXICO 5, D. F.

DIRECTOR:
DR. MARCO ANTONIO VILLASEÑOR
TEL. 531-65-96

CO-DIRECTOR:
DR. NORVAN L. MEYER
TEL. 531-65-63

B

28 NOV 1973

November 19, 1973

Dr. Héctor Campos López
Director General Sanidad Animal
Doctor Mora #15 - 9°Piso
México 1, D. F.

Estimado colega:

Since the discussions in your office on Friday evening I have secured considerable information on the conduct of the pesticide trials in Northern Mexico. This information came from Dr. Graham, ARS Entomologist from Kerrville, Mr. Ashley Taylor, Livestock Inspector with the Northern Mexico screwworm program, Mr. W. V. (Bill) Miller, Shell Chemical Company U.S.A., and Dr. James Hourrigan, Senior Staff Veterinarian of the Sheep, Goat, Equine and Ectoparasites, Staff, Veterinary Services, Hyattsville, Md.

The information on the test was previously unavailable here in Mexico City and I believe it will clear up most if not all the questions you may have.

I am sure you are already aware that Entomologists from Entomology Research, Agricultural Research Service (ARS), largely those from the Kerrville Laboratory, have done considerable work in Mexico testing various pesticides against Boophilus spp. ticks and/or screwworms. ARS researchers have enjoyed an excellent relationship with counterpart officials in SAG and with cooperating Mexican ranchers. This work has been done at various locations in Mexico including the facility in Nuevo Laredo, Tamaulipas, Mexico.

The first suggestion for the just completed tests in Northern Mexico came in January 1973 when Mr. Bill Miller of Shell Chemical U.S. called Dr. Roger O. Drummond, Entomology Research, Kerrville, Texas to discuss the efectiveness of compound 4072 "Supona" for the control of ticks.

In March 1973, at Beltsville, Maryland, Dr. R. K. Strickland dipped 4 sheep infested with psoroptic scabies mites and a 1-week-old lamb in 0.10 percent Supona. The result of this limited work was encouraging.

On April 24, 1973, Bill Miller and Dr. Robert Young of Shell U.S. visited the APHIS Washington office and discussed the work which would be necessary prior to considering Supona a permitted dip for ticks, screwworms, and/or scabies. Shell representatives were advised that APHIS depended heavily upon ARS for data on efficacy of pesticides looking to Dr. Roberts' work at Alburquerque in regard to scabies research and Dr. R. C. Bushland, Dr. Hugh Graham, and others of the Kerrville group for research on ticks and screwworms. Animal disease eradication programs throughout the world have and are benefiting greatly from the outstanding professional contributions these scientists are making.

On May 7, Mr. Miller and Dr. Young of Shell U.S., and the representative of Shell Mexico, Ing. García visited with Dr. Marco Antonio Villaseñor and Dr. Daniel F. Werring in the Screwworm Commission offices and discussed the proposed work to test the efficacy of Supona against ticks and screwworms.

On May 10, Shell of Mexico wrote to Dr. Villaseñor in regard to the project. Mr. Miller of Shell U.S. says that he considered Dr. Villaseñor's signature on the letter as approval for the project (copy of English translation of that letter is enclosed). Mr. Miller says that he also discussed the proposed test with tick control officials of your National Tick Eradication Campaign and received encouragement and offers of help to conduct the test. During July, Mr. Miller also visited Tick Campaign personnel in Valles, S.L.P. where encouragement and offers of help were received. Mr. Miller says, "They were all for the test."

The tests were considered desirable by APHIS since earlier tests in the United States had indicated the chemical was highly effective as a pesticide when infested cattle were sprayed or dipped but no information was available concerning the period that treated cattle would be protected from reinfestation from screwworms and ticks. Two companies, Shell and Cooper, have proposed to register formula 4072 in the U.S. to combat ticks and screwworms. It was not considered technically feasible to conduct the test in the U.S. because of the lack of areas infested simultaneously with both pests.

Shell Chemical Co. officials again visited screwworm and tick control officials in Mexico during July 1973 for the purpose of further discussing the proposed tests.

In late August or early September, Mr. Miller visited Mission, Texas and Kerrville, Texas and suggested an early initiation of the tests, perhaps October 1, 1973. An October 10, 1973 initiation date was agreed upon. It was also agreed that Mr. Miller would develop a test protocol. When time for the test approached and no test protocol had been received, Dr. Graham hurriedly prepared a tentative schedule for

the test in accordance with the verbal information he had received from Mr. Miller.

On September 27, following the screwworm meeting at Mission, Texas, Dr. Williams, Dr. Hourrigan and Dr. Bushland reviewed the tentative schedule that had been provided by Dr. Graham. That same day it was learned that Cooper U.S. desired to have its formulation of Compound 4072 included in the test. Since they had provided 4072 for earlier work and have developed some excellent formulations of pesticides their formulation was included in the test.

On October 9, 1973, Dr. Graham and Mr. Hopkins proceeded from Kerrville, Texas to Cd. Victoria, Tamaulipas. They had been requested by Shell of U.S. through APHIS and ARS officials for them to act as technical advisors for the test and provide biological evaluation of test results.

During the May 7 meeting Shell officials had requested the assistance of Northern Mexico Screwworm Program inspectors in locating ranchers who might cooperate in the test by furnishing cattle and dipping vats. Drs. Villaseñor and Werring agreed. We have since learned that our inspectors' cooperation was carried much further than had been agreed upon. These inspectors have been advised of the seriousness of the situation and have been warned that any reoccurence would result in severe disciplinary action.

Two ranches were selected and tests were initiated on October 11, 1973. All animals belonged to owners at San Pedro and Petaqueño, however, some of the Petaqueño animals were dipped in a vat located at La Negra. One lot of 20 infested yearling calves were dipped in each of the following insecticides: Shell Supona 8 pounds per gallon - SS, Cooper 4072 DFF and Coumaphos (asuntol). Asuntol was included as a standard against which results with the other two chemicals could be compared. Additional calves were used as untreated controls. Treated animals were challenged at approximately 3 - 4 day intervals by implanting newly hatched screwworms in each of 4 wounds on each test calf until larval survival was observed. In addition, one fifth of the calves in each treatment group were exposed to artificial infestation by Boophilus Microplus. All calves were subject to natural infestation by both pests. The test animals were challenged 5 times and at the end almost all wounds had become reinfested with screwworms and tick infestation had been reestablished. A more complete report on comparative resistance to reinfestation will be made available when the raw data has been analyzed.

Several calves were apparently mildly poisoned by both formulations of compound 4072 and 6 calves (3 from the test group of 20 and 3 others) dipped in Shell Supona died within 24 hours of dipping. Apparently the formulation was more toxic than had been expected.

Mr. Miller, the Shell U.S. Company representative, expressed interest in charging other vats at the normal concentration level to test the

disproportionate carryout level of the Shell formulation. Arrangements were made to conduct this evaluation at Rancho La Rosita.

The Shell Supona was in 5 gallon cans and had the regular Spanish language commercial label for 20% EC which clearly said that the total active ingredient was 20.97%. Mr. Hopkins of ARS correctly calculated that 18 liters of such concentrate would give a final concentration of 0.04% actually 0.03762% if vat capacity as provided by the owners was correct and that quantity was placed in the vat. Only after dipped cattle started to show signs of poisoning was it deduced that the cans of concentrate were incorrectly labeled. The pesticide was actually Shell Supona 8 pounds (approximately 80%) per gallon. The final concentration in the dipping vat was then estimated at 0.1812%. A total of 890 cattle were dipped at La Rosita before signs of poisoning were observed and the operation stopped.

When the report of poisoning was received at Cd. Victoria, Dr. Miguel Coo Luna, a veterinarian from the state cattlemens association went to the ranch and worked 3 days and nights. He probably saved many cattle that would have died without his care. Most of the cattle dipped were Zebu but some Brangus and Angus were also dipped. Apparently the Angus were the most susceptible as most of the dead animals were Angus calves. When the cowboys on the ranch started mentioning killing Mr. Hopkins who had calculated the amount of pesticide, Mr. Taylor said he would assume responsibility for the loss and pay for the dead animals. He did this he says to prevent physical harm to the person of Mr. Hopkins.

Shell Chemical Company has since reimbursed the owners for all animals lost. It is my understanding that the owners are satisfied with the settlements they received.

TEST-SUMMARY

RANCH	DATE DIPPED	# DIPPED	# DEAD FROM DIPPING	PESTICIDE USED	PURPOSE OF TEST	REMARKS
La Rosita	10/24	890	63	0.18% Shell Supona (Estimate)	Test .04% solution for rate of carryout	Vat was over-charged through error
San Pedro	10/15	20	3	0.12% Shell Supona	Check .1% solution for insecticidal effectiveness	
San Pedro	10/18	10	3	0.12% Shell Supona	Follow up on test of 10/15 to check toxcity	
La Negra	10/16	20	0	0.1% Cooper 4072	Check 0.1% solution for insecticidal effectiveness	1 died from starvation 1 died from secondary infection of SW wound
Petaqueño	10/16 10/17 10/21	7 2 10	0	0.12% Asuntol	Used as a standard of comparison	4 died from secondary infection following SW infection.
						*ANIMALS DIPPED IN VAT AT LA NEGRA

In addition to those animals included in the pesticide residual effectiveness tests, a number of adult animals were dipped at La Negra and San Pedro to mix the water and pesticide before the test animals were dipped., All test animals at San Pedro, La Negra and Petaqueño were weanling calves (estimated 8-12 months of age). At La Negra the owner reported that 3 of the cows dipped to stir the vat subsequently aborted. Although it was not confirmed that dipping caused the abortions the Cooper company reimbursed the owners for the loss. Mr. Miller says and Dr. Graham confirms that insecticide residual effectiveness tests were conducted on three ranches--San Pedro, La Negra and Petaqueño. No other ranches were involved. A test to check for disproportionate carry out was conducted at ranch, La Rosita. La Rosita is owned by the same man who owns El Trece. No other ranches were involved in any of the tests.

I have been advised by Mr. Miller that all testing has been stopped and that no further test activity of any kind will be carried out without express permission to do so from you or persons you may designate. Dr. Hugh Graham completed the biological evolution of residual action of the pesticides under test. Following the visit to your office on Friday night, November 16, 1973, Dr. Cox, Associate Deputy Administrator ARS, requested that Dr. Graham come to Mexico City to provide information on the test. He and Mr. Taylor arrived Saturday night and spent Sunday with Dr. Werring and I explaining their part in the tests. I also talked at considerable length with Mr. Miller and Dr. Hourrigan on the phone. This report is only possible because of information supplied by them.

Mr. Miller stated that he accepts full responsibility for the problems that have arisen and the misunderstanding concerning permission to conduct the test. He also apologized for failure to submit a test protocol before the test was started as he had promised. I asked him whether the pesticide concentrate containers contained Spanish labels. He replied that he had personally inspected each can of pesticide used and each contained a regular Spanish language label pasted over a small experimental use label, printed in English. The Shell pesticide used in the tests was air shipped by Shell of U.S. to Shell of Mexico in Mexico City where the Spanish language label was applied. The product was subsequently reshipped by Shell of Mexico to Cd. Victoria.

Mr. Miller also stated that he has prepared a report which has been forwarded to you through Shell of Mexico and should reach you about November 23, 1973. I have not seen that report but Miller says he acknowledges responsibility for all the problems which developed and for all phases of the test except the actual conduct of the biological evaluation following dipping.

Mr. Miller says that he informed Ingeniero García, the Shell of Mexico representative, of the plan to initiate the test in early October.

Ing. García advised that prior commitments would prevent his participation before October 15.

After talking with those principally involved in planning and conducting this test it becomes apparent that ARS & APHIS people believed Shell Chemical Company had secured the necessary clearance for the tests. Shell Chemical Company considered that Dr. Villaseñor's signature on their May 10, 1973 letter constituted approval of the Government of Mexico for the tests. It also seems evident that in reality Shell Chemical Company did not receive a clear cut and specific authorization to proceed.

I have been asked to present apologies for APHIS & ARS personnel who may have conducted activities in your country without proper authorization where they thought they were carrying out plans jointly agreed upon by appropriate officials of our two governments.

I believe that APHIS & ARS personnel understand the need for proper authorization before becoming involved with tests of this kind and I am sure they will present their plans in writing before becoming actively involved in future tests in Mexico. Tests of the kind just completed are important to the Screwworm and Tick Eradication Programs.

Should there be problems of this type in the future please consider me your personnel route of access to Veterinary Services. I will do everything I can to help get the information you desire. Of course, you may call Dr. Saulmon at anytime and I especially urge you to call him if a problem of an international character needs attention.

I regret the length of time it took to gather the above. If you need any additional information concerning the recent pesticide trials in Northern Mexico, please let me know.

Su afectísimo y seguro servidor,

Norvan L. Meyer

DR. NORVAN L. MEYER
CO-DIRECTOR

COMISION MEXICO-AMERICANA PARA LA ERRADICACION DEL GUSANO BARRENADOR

LA ENERGIA ATOMICA AL SERVICIO DEL GANADERO

LEIBNITZ No. 20 - 12o. PISO
MEXICO 5, D. F.

DIRECTOR:
DR. MARCO ANTONIO VILLASEÑOR
TEL. 531-65-96

CO-DIRECTOR:
DR. NORVAN L. MEYER
TEL. 531-63-59

B

26 NOV 1973

November 19, 1973

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Director General Sanidad Animal
Doctor Mora #15 - 9°Piso
México 1, D. F.

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Ing. García advised that prior commitments would prevent his participation before October 15.

After talking with those principally involved in planning and conducting this test it becomes apparent that ARS & APHIS people believed Shell Chemical Company had secured the necessary clearance for the tests. Shell Chemical Company considered that Dr. Villaseñor's signature on their May 10, 1973 letter constituted approval of the Government of Mexico for the tests. It also seems evident that in reality Shell Chemical Company did not receive a clear cut and specific authorization to proceed.

I have been asked to present apologies for APHIS & ARS personnel who may have conducted activities in your country without proper authorization where they thought they were carrying out plans jointly agreed upon by appropriate officials of our two governments.

I believe that APHIS & ARS personnel understand the need for proper authorization before becoming involved with tests of this kind and I am sure they will present their plans in writing before becoming actively involved in future tests in Mexico. Tests of the kind just completed are important to the Screwworm and Tick Eradication Programs.

Should there be problems of this type in the future please consider me your personnel route of access to Veterinary Services. I will do everything I can to help get the information you desire. Of course, you may call Dr. Saulmon at anytime and I especially urge you to call him if a problem of an international character needs attention.

I regret the length of time it took to gather the above. If you need any additional information concerning the recent pesticide trials in Northern Mexico, please let me know.

Su afectísimo y seguro servidor,

Norvan L. Meyer

DR. NORVAN L. MEYER
CO-DIRECTOR

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
WASHINGTON, D.C. 20250

OFFICE OF ADMINISTRATOR

November 29, 1973

AIRMAIL

Dr. Hector Campos Lopez
Director, Sanidad Animal
Dr. Mora 15
9º Piso
Mexico City D.F., Mexico

Dear Dr. Campos Lopez:

Following his recent return from Mexico, Dr. H C Cox informed me of his discussion with you regarding Agricultural Research Service (ARS) involvement in a tick-screwworm chemical control field trial in the State of Tamaulipas during which an unfortunate incident of accidental cattle deaths occurred. I understand that Drs. Villasenor and Fernandez of your staff, Dr. Meyer of the USDA Animal and Plant Health Inspection Service (APHIS), and Dr. Hightower of our Agency (ARS) also participated in the meeting on November 17. It seems that certain commercial chemical companies, APHIS, and ARS personnel were involved in planning as well as conducting the research.

On the basis of information provided to me, there was obviously a failure in keeping your office fully informed. I am especially concerned that ARS personnel appear to have failed to maintain the close contact and working relationship with your staff that I understand has been characteristic of our organizations in the past. Dr. Cox tells me that Dr. Villasenor spoke with special praise regarding his past association with our scientists. He also tells me that our scientists have equally high regard for Dr. Villasenor.

Your national tick eradication program and the Mexican-American screwworm eradication program are highly important to both U.S. and Mexican agriculture. As the Agency charged with responsibility for conducting the USDA research related to the screwworm program, we hope that the cattle dipping incident at La Trece and the circumstances accompanying it will not hinder our opportunity to work with you on this important project.

I understand that Dr. Meyer of APHIS is working with members of his staff and ours in preparing a report on the above subject. Additionally, Dr. Cox tells me that during your meeting, Dr. Fernandez

suggested that any future, formal proposals for ARS livestock involving toxic chemicals in Mexico be referred to your office and that he concurred in behalf of the office of the Deputy Administrator for the Southern Region of ARS. I am pleased that your office and our Southern Region have made this arrangement, with which we concur. I was especially pleased to learn that you suggested that the scientists and research leaders of our respective staffs continue to work together informally in developing research plans that may be submitted for formal approval.

We deeply regret the incident in Tamaulipas but you can be sure that ARS will make every effort to prevent the occurrence of any similar incident in the future.

Sincerely,

Ralph J. McCracken
Associate Administrator

cc:
F. J. Mulhern, Administrator, APHIS
bcc:
G. H. Wise, APHIS
N. L. Meyer, APHIS, Mexico City
E. A. Taylor, AD, Weslaco, Texas
J. R. Johnston, AD, College Station, Texas
A. W. Cooper
R. O. Drummond, Kerrville, Texas
R. C. Bushland, Mission, Texas

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
WASHINGTON, D.C. 20250

OFFICE OF ADMINISTRATOR

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	Marcley
4	Bridges
5	Lucy

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9º Piso
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J. R. Johnston, AD, College Station, Texas
A. W. Cooper
R. O. Drummond, Kerrville, Texas
R. C. Bushland, Mission, Texas

FILE: SECTION _____

SUBJECT _____

FOLDER _____

DRAFT: OHGraham:je 12-3-73

Dr. Hector Campos Lopez, Director General
Sanidad Animal
Dr. Mora No. 15, 9th Floor
Mexico City 1, D. F., Mexico

Dear Dr. Campos:

It was a pleasure to make your acquaintance at the time of my visit to Mexico City on November 17, and I appreciate the opportuntiy to discuss some of our research programs with you. Like you, I was greatly concerned about the problems that had arisen in connection with the evaluations of Supona as a livestock dip in Tamaulipas and deeply regret that animals were poisoned in the course of these tests. Undoubtedly, most of these losses could have been avoided had the trials been more carefully planned and coordinated.

Dr. Norvan Meyer has very kindly provided me with a copy of his letter of November 19 to you. I feel that Dr. Meyer has written a very accurate report of the tests and of the events that preceded them. It is now clear that ARS employees acted without proper formal approval but I would like to assure you that any neglect on our part was not intentional. In addition, you may be assured that if an appropriate need for research in Mexico that would involve livestock develops in the future, appropriate proposals will be presented to your agency and concurrence will be obtained before any further plans are made. For many years we have coordinated research on agricultural pests with Sanidad Vegetal and Instituto Nacional de Investigaciones Agricolas and will be happy to do the same with Sanidad Animal, if animals are to be studied.

Sincerely,

H. C. Cox
Associate Deputy Administrator

Dr. Hector Campos Lopez, Director General
Sanidad Animal
Dr. Mora No. 15, 9th Floor
Mexico City 1, D. F., Mexico

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H. C. Cox
Associate Deputy Administrator

DRAFT:OHGraham:EATayl :je 12-3-73

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EAT

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Sanidad Animal
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Mexico City 1, D. F.

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Dr. Norvan Meyer has very kindly provided me with a copy of his letter to you of November 19. I feel that Dr. Meyer has written a very accurate report of the tests and of the events that preceded them. I assure you that in the future, if a need for research involving insecticide treatment of livestock in Mexico develops, appropriate proposals will be presented to your agency and we will await your agency's official concurrence before we undertake such experiments. For many years we have coordinated insecticide research on plant pests with Sanidad Vegetal and Instituto Nacional de Investigaciones Agricolas and will be happy to do the same with Sanidad Animal, if animals are involved.

Sincerely,

H. C. Cox
Associate Deputy Administrator

Letter not mailed

COMISION MEXICO-AMERICANA PARA LA ERRADICACION DEL GUSANO BARRENADOR

LA ENERGIA ATOMICA AL SERVICIO DEL GANADERO

LEIBNITZ No. 20 - 12o. PISO
MEXICO 5, D. F.

DIRECTOR:
DR. MARCO ANTONIO VILLASEÑOR
TEL. 531-65-98

CO-DIRECTOR:
DR. NORVAN L. MEYER
TEL. 531-85-69

December 13th, 1973

12/19/73
Confidential
for E A Taylor
from RC Buchholz

DR. M. E. MEADOWS
P. O. Box 969
Mission, Texas 78572

Dear Dr. Meadows:

In reference to your letter dated the 3rd of December, we wish to inform you that we would be glad to meet you at Mexico City, Mission, Texas or any other place, in order to discuss the plans in connection with the establishment of the distribution centers.

Sincerely Yours,

Marco A. Villaseñor
Dr. Marco A. Villaseñor
Director

L. D. Meyer
Dr. Norvan L. Meyer
Co-Director

MAV'mam

Certificate of Assay
for Mr. Geo.

E. A. Taylor
Weslaco, Texas

Zot

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
SOUTHERN REGION
701 LOYOLA AVENUE
P. O. BOX 53326
NEW ORLEANS, LOUISIANA 70153

December 18, 1973

Subject: Research in Mexico

To: J. R. Johnston, AD, College Station, Tex.
E. A. Taylor, AD, Weslaco, Texas
R. C. Bushland, LL, Mission, Texas
R. O. Drummond, LL, Kerrville, Texas

Each of you should have received a carbon copy of Dr. R. J. McCracken's November 29 letter to Dr. Hector Campos Lopez regarding the experiment in the State of Tamaulipas; however, the photocopy is enclosed. Please note the paragraph at the top of page two which indicates that the Deputy Administrator of the Southern Region will communicate formal proposals for ARS livestock (research) involving toxic chemicals in Mexico to Dr. Campos Lopez.

I do not believe that this small amount of formality will impede your respective research programs in Mexico inasmuch as Dr. Campos Lopez seemed quite willing to have our research people work directly with his staff informally in the planning stages. Hence, after you have developed plans which necessitate involvement with personnel from Sanidad Animal, please inform us of the details so that we may communicate them to Dr. Campos Lopez.

H C Cox
Associate Deputy Administrator

Enclosure

FILE: SECTION Research
SUBJECT Screwworm
FOLDER Mexico

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
SOUTHERN REGION
701 LOYOLA AVENUE
P. O. BOX 53326
NEW ORLEANS, LOUISIANA 70153

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H. C. Cox
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Enclosure

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